SONY

TRINITRON® COLOR TV BASIC SCHEMATIC DIAGRAM

KV-3400D/RM-679MTP *Chassis No. SCC-C29B*

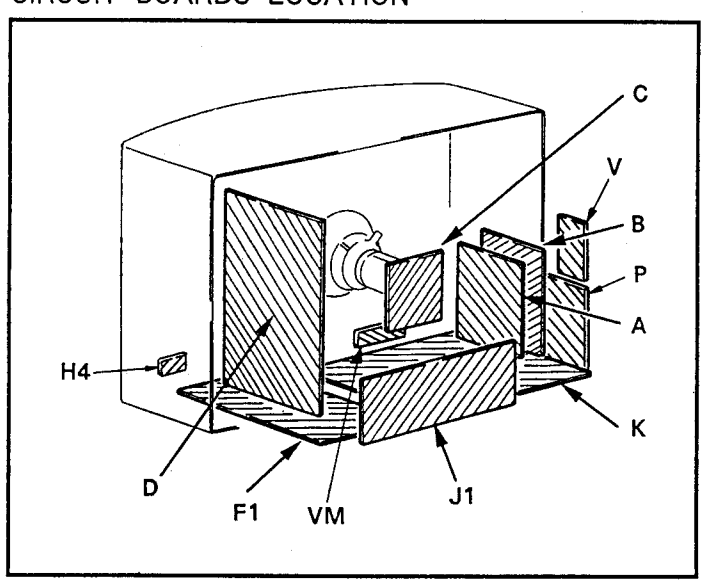
NOTE

THIS SCHEMATIC DIAGRAM IS FOR USE BY YOUR SERVICE TECHNICIAN.
KEEP THIS DIAGRAM HANDY FOR FUTURE REFERENCE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND ⚠ MARK ON THE SCHEMATIC DIAGRAMS ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THE SERVICE MANUAL.

CIRCUIT BOARDS LOCATION



3-750-048-01

Sony Corporation

©1989

Printed in Japan

Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm Rating electrical power : 1/4W

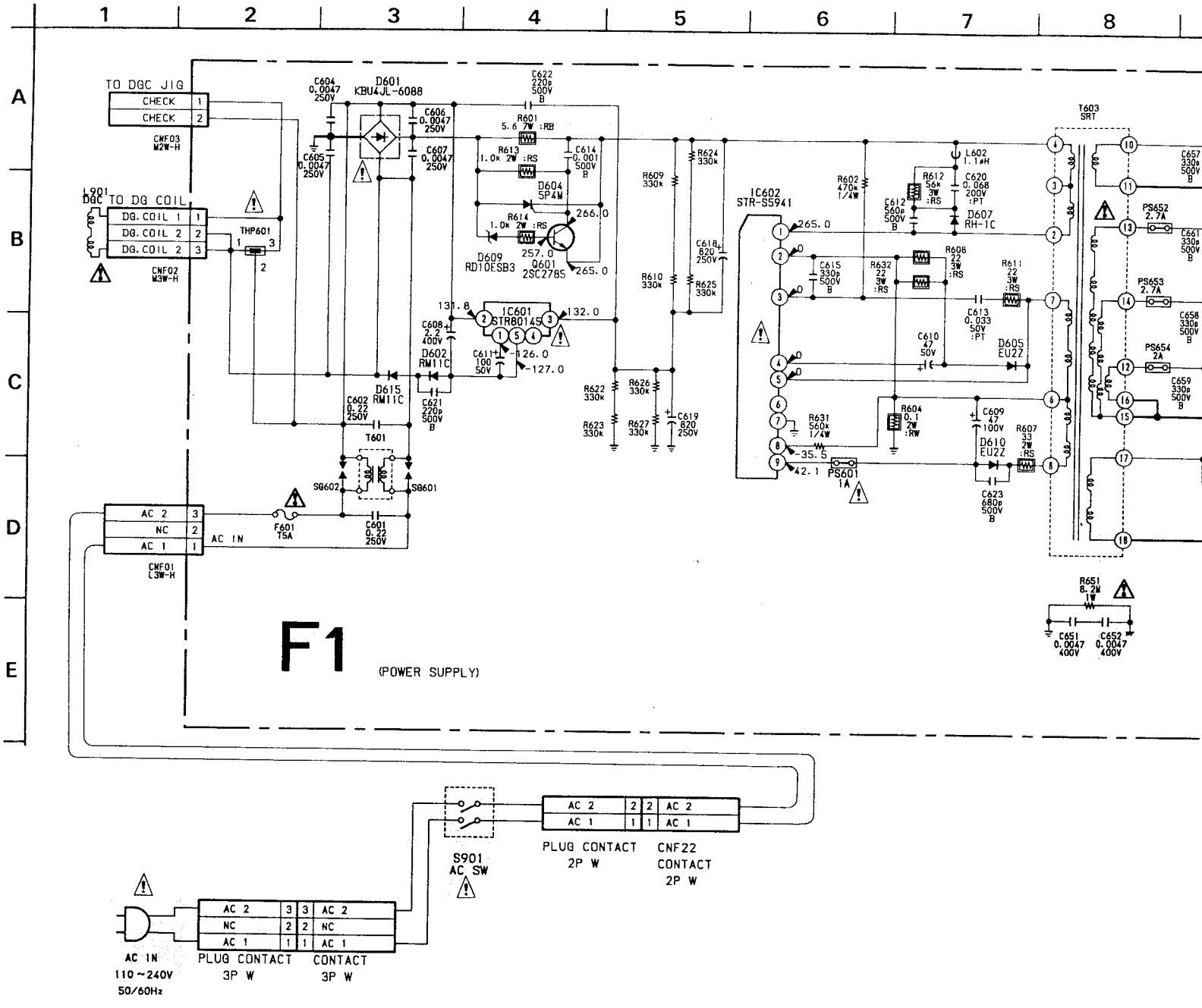
- All resistors are in ohms.
- : nonflammable resistor.
- △ : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a PAL color-bar signal input.
  no mark : PAL
  < > : SECAM
  ( ) : NTSC 3.58MHz
  〔 〕 : NTSC 4.43MHz
- : adjustment for repair.
- Voltage variations may be noted due to normal production tolerances.
- : B+line
- : signal path.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE WIREWOUND
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ABL	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

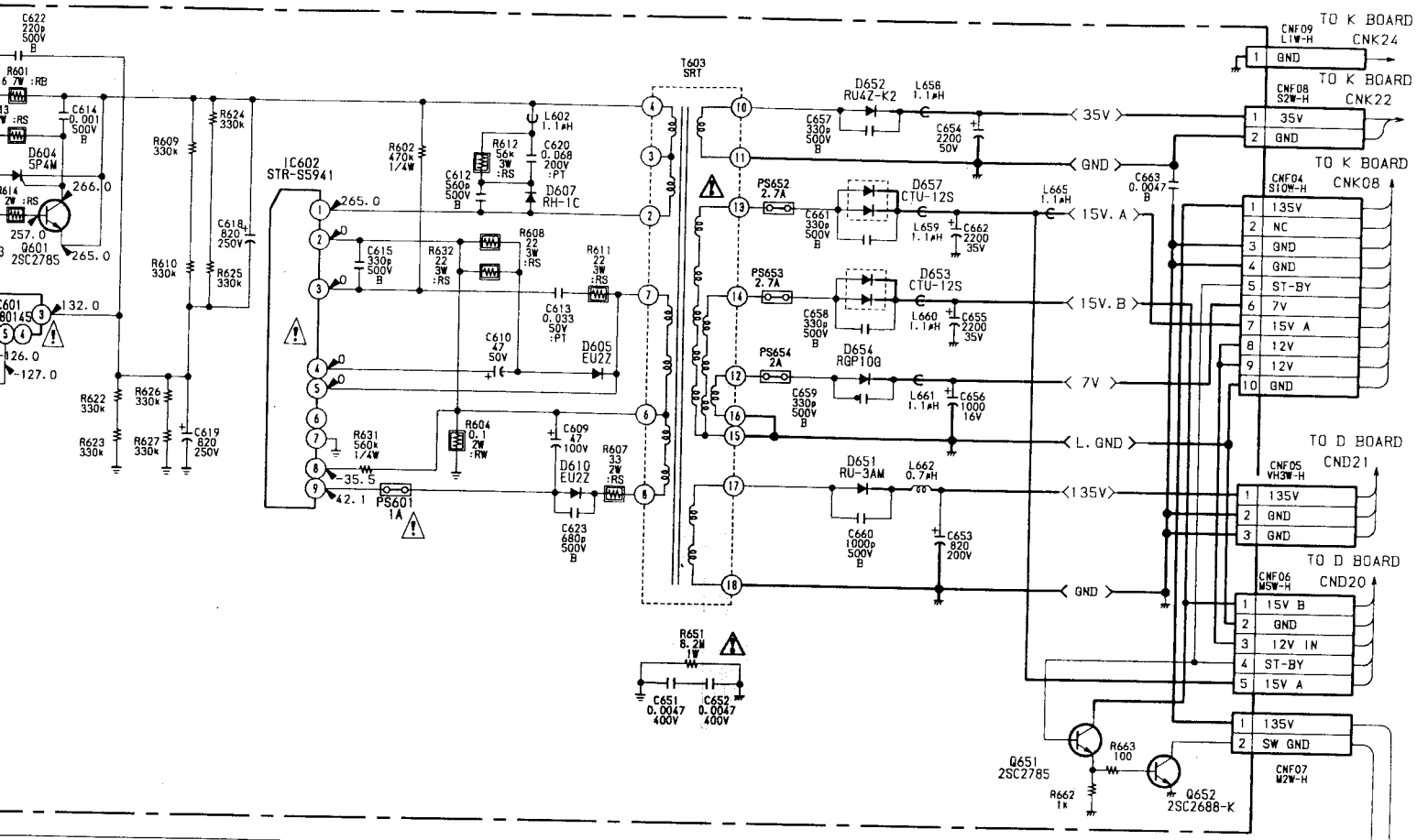
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SCHEATIC DIAGRAM



F1 [POWER SUPPLY]

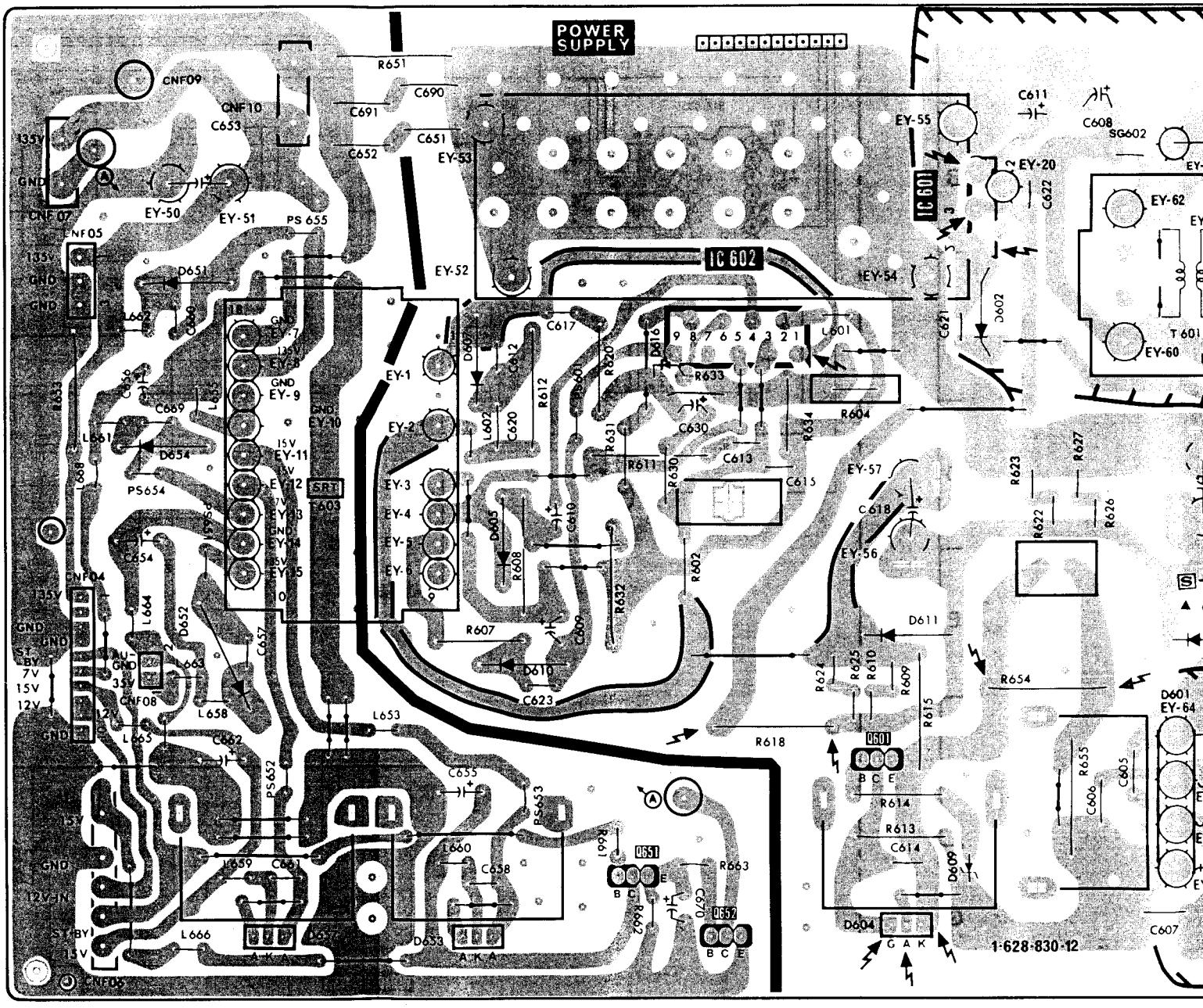
4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12



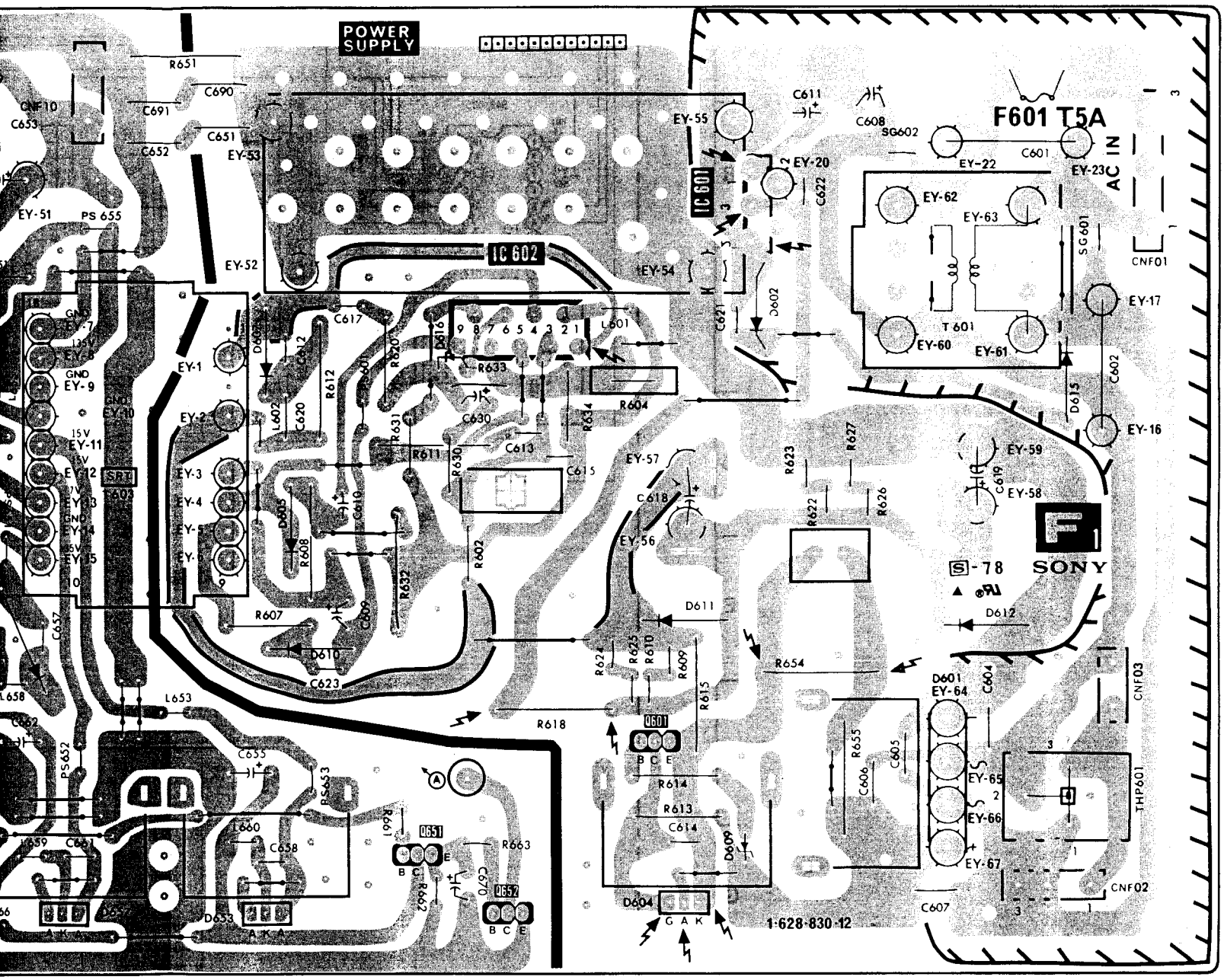
PRINTED WIRING BOARD

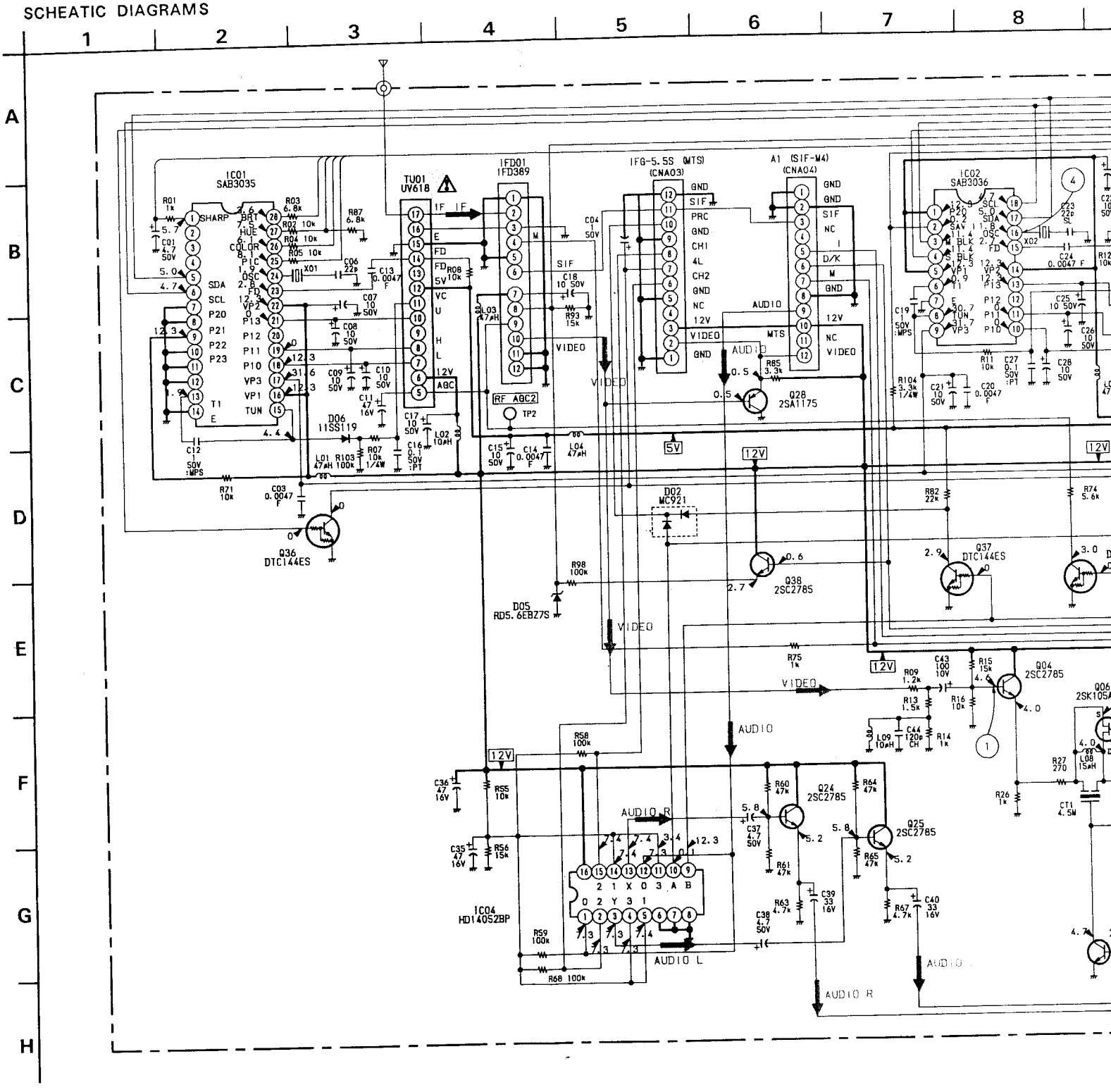
–Conductor Side–

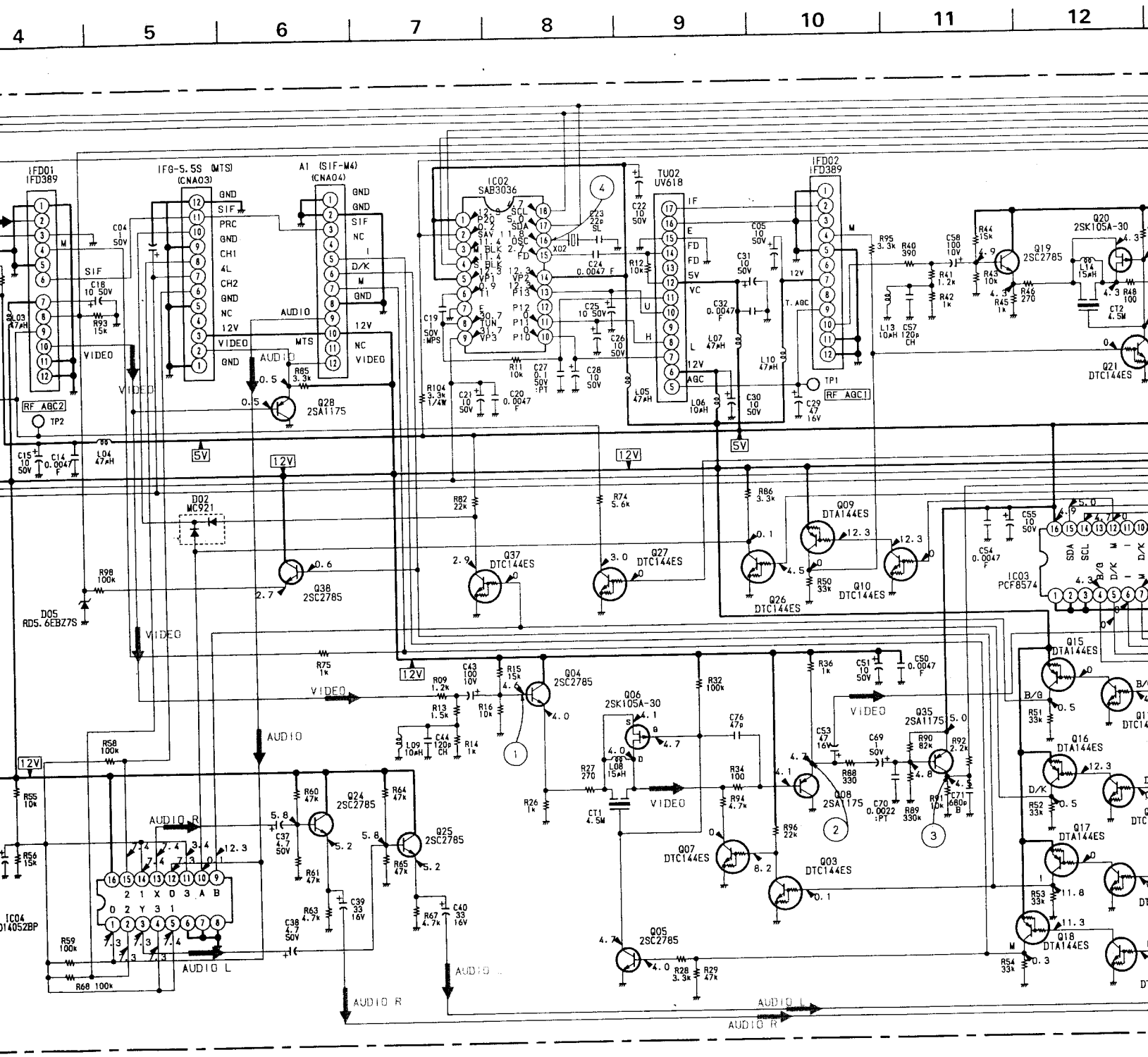
– F1 Board –



ARD

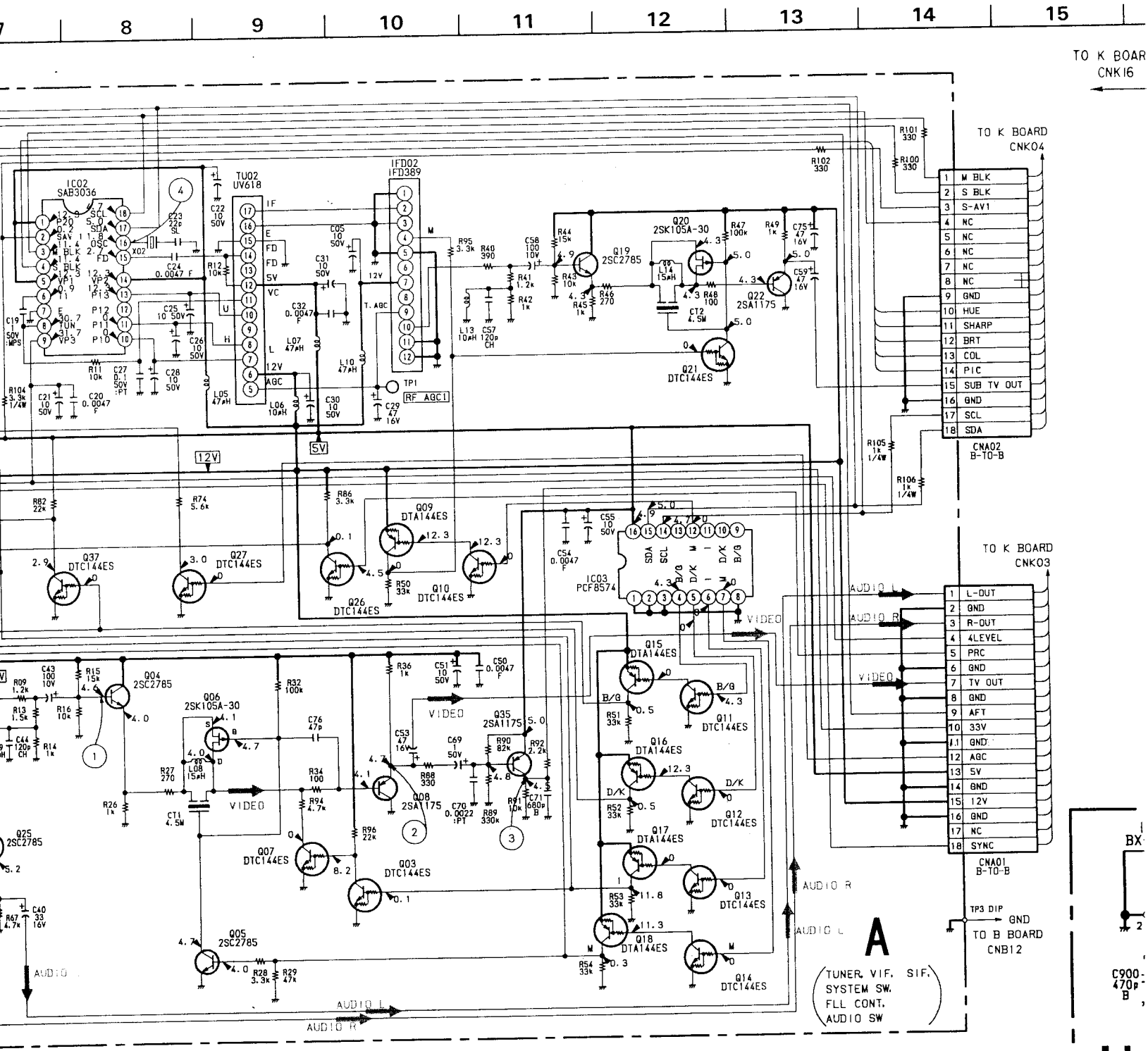

POWER SUPPLY
F601 T5A
AC IN
IC 601
IC 602
T 601
SG601
SG602
CNF01
CNF02
CNF03
THP601
PS 655
PS652
PS653
SRT
S-78
SONY
1-628-830-12
EY-1
EY-2
EY-3
EY-4
EY-5
EY-6
EY-7
EY-9
EY-10
EY-11
EY-12
EY-13
EY-14
EY-15
EY-16
EY-17
EY-20
EY-22
EY-23
EY-51
EY-52
EY-53
EY-54
EY-55
EY-56
EY-57
EY-58
EY-59
EY-60
EY-61
EY-62
EY-63
EY-64
EY-65
EY-66
EY-67
Q601
Q651
Q652
D601
D602
D604
D605
D606
D607
D608
D609
D610
D611
D612
D615
D616
D633
L601
L602
L653
L658
L660
L661
R604
R607
R608
R609
R611
R613
R614
R618
R624
R625
R632
R633
R654
R655
R662
R663
C602
C603
C604
C605
C606
C607
C608
C609
C610
C611
C613
C614
C615
C618
C619
C620
C621
C622
C623
C630
C635
C637
C638
C651
C652
C653
C690
C691


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
IC01
SAB3035
TU01
UV618
IFD01
IFD389
IFG-5.5S (MTS)
(CNA03)
A1 (SIF-M4)
(CNA04)
IC02
SAB3036
SHARP
SDA
SCL
P20
P21
P22
P23
P10
P11
P12
P13
VP3
VP1
TUN
T1
E
IF
E
FD
5V
VC
U
H
L
12V
AGC
SIF
PRC
GND
CH1
4L
CH2
NC
D/K
M
VIDEO
AUDIO
MTS
RF AGC2
TP2
D06
1ISS119
D02
MC921
D05
RD5.6EBZ7S
Q36
DTC144ES
Q28
2SA1175
Q37
DTC144ES
Q38
2SC2785
Q04
2SC2785
Q06
2SK105A
Q24
2SC2785
Q25
2SC2785
IC04
HD14052BP
AUDIO L
AUDIO R
5V
12V



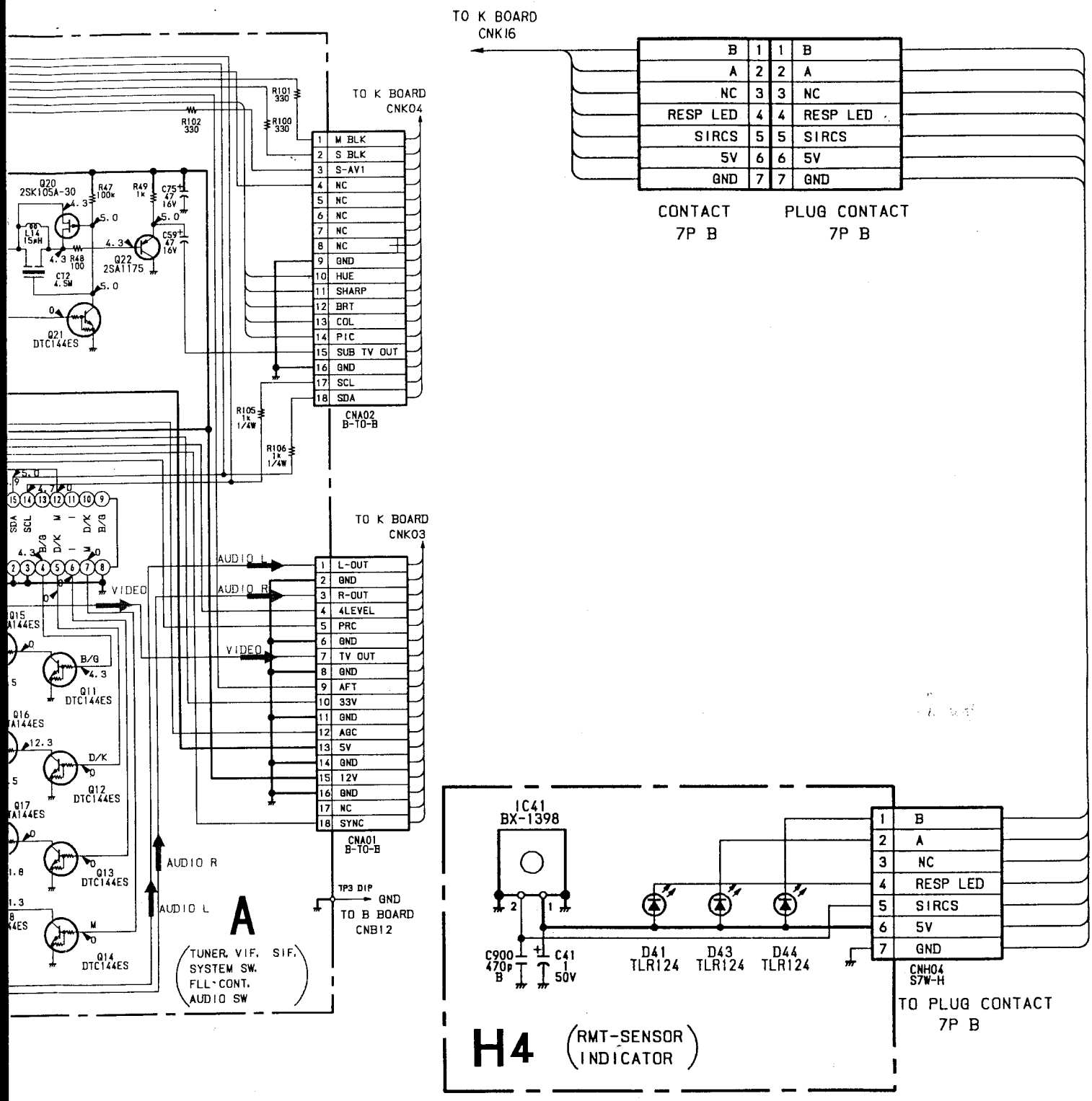
● A BOARD WAVEFORM

①	②	③
1.1 Vp-p (H)	1.1 Vp-p (H)	0

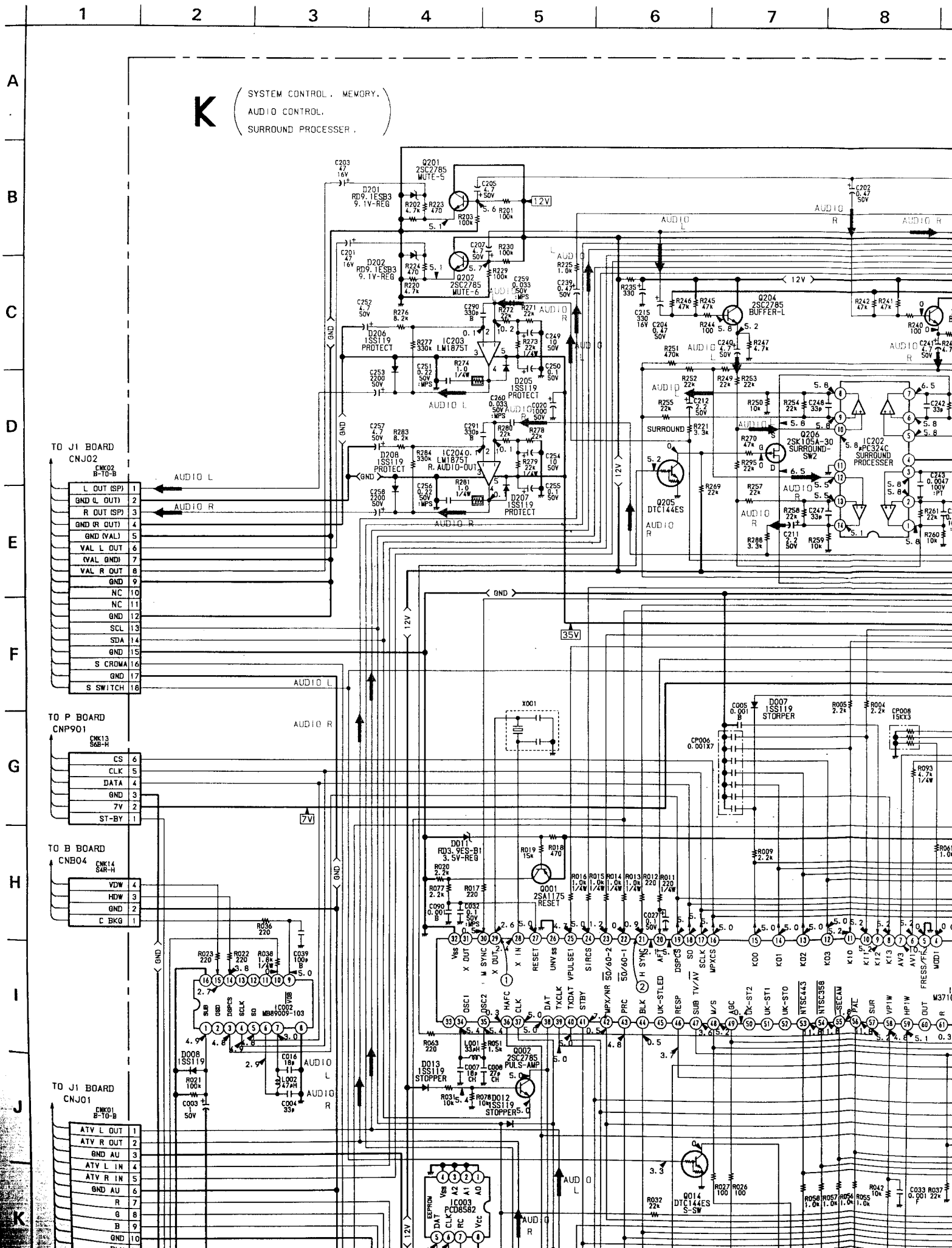


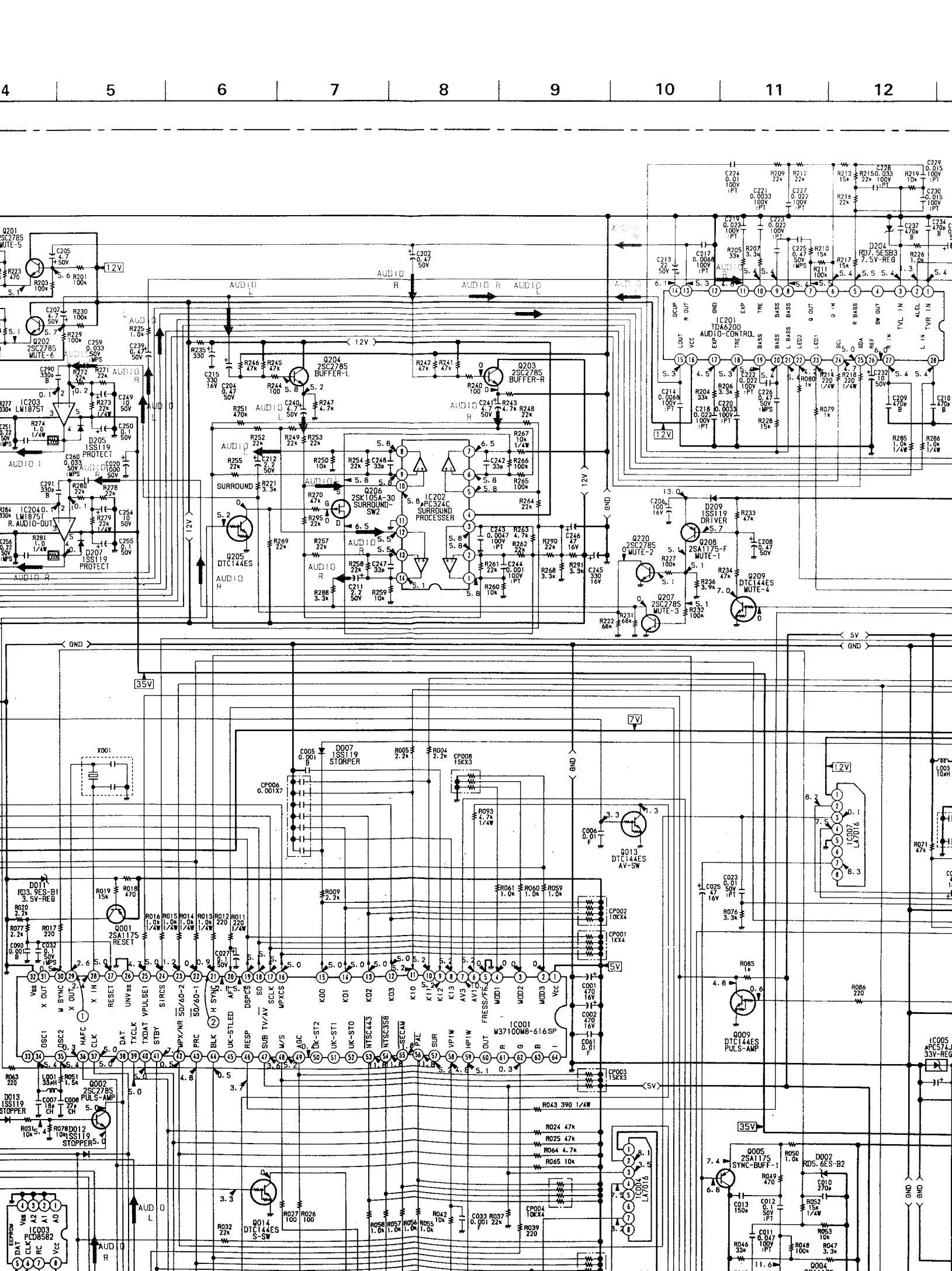
● A BOARD WAVEFORM

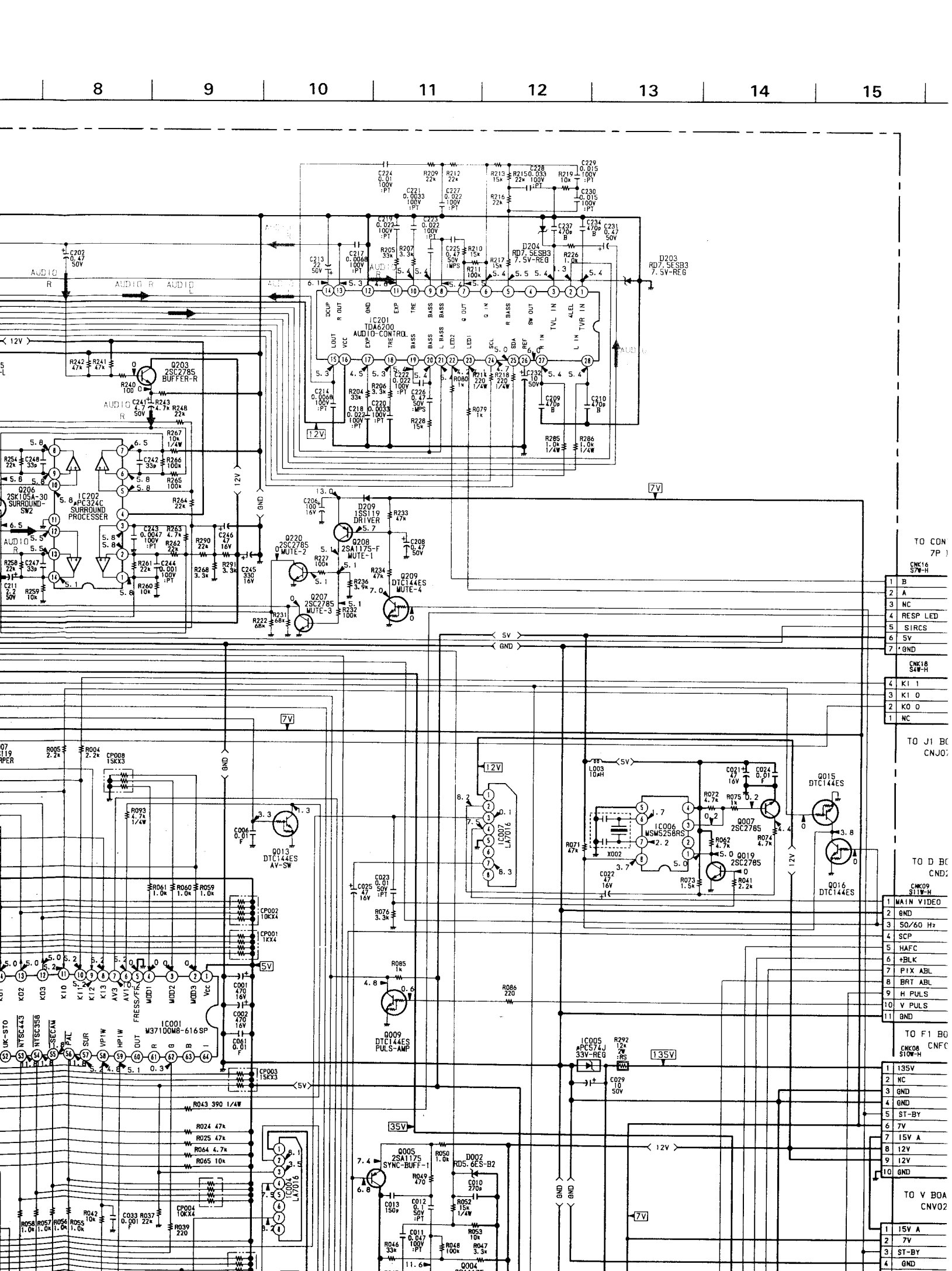
①	②	③	④
1.1 Vp-p (H)	1.1 Vp-p (H)	0.8 Vp-p (H)	0.24 Vp-p (4MHz)

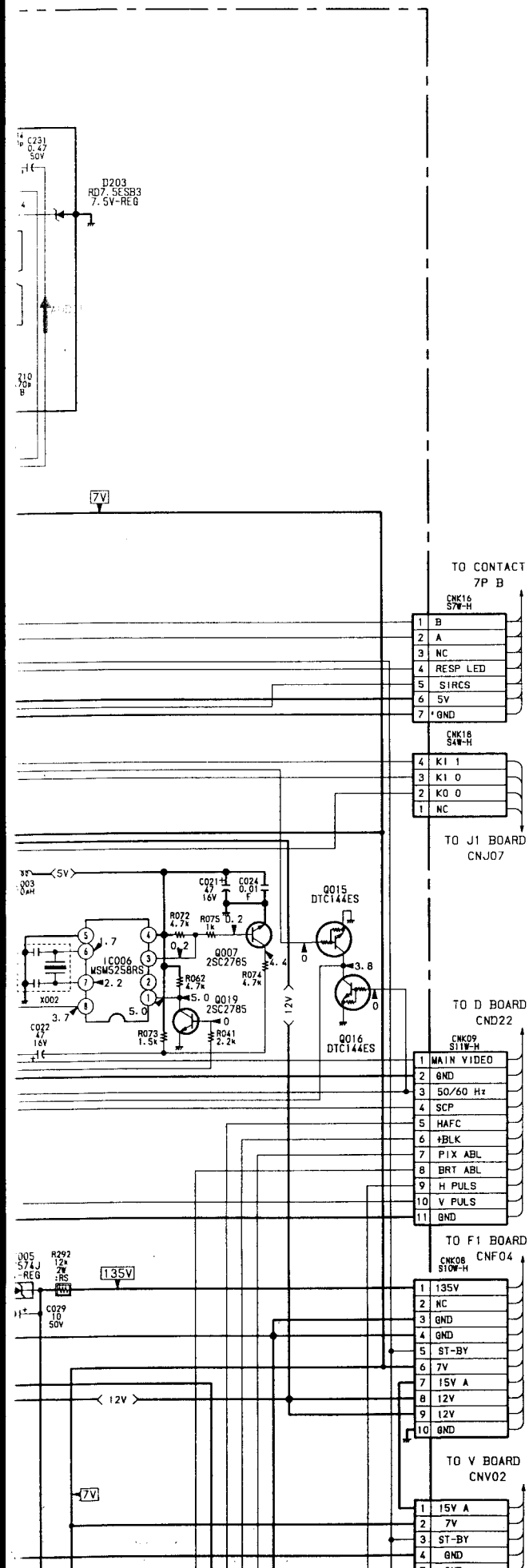


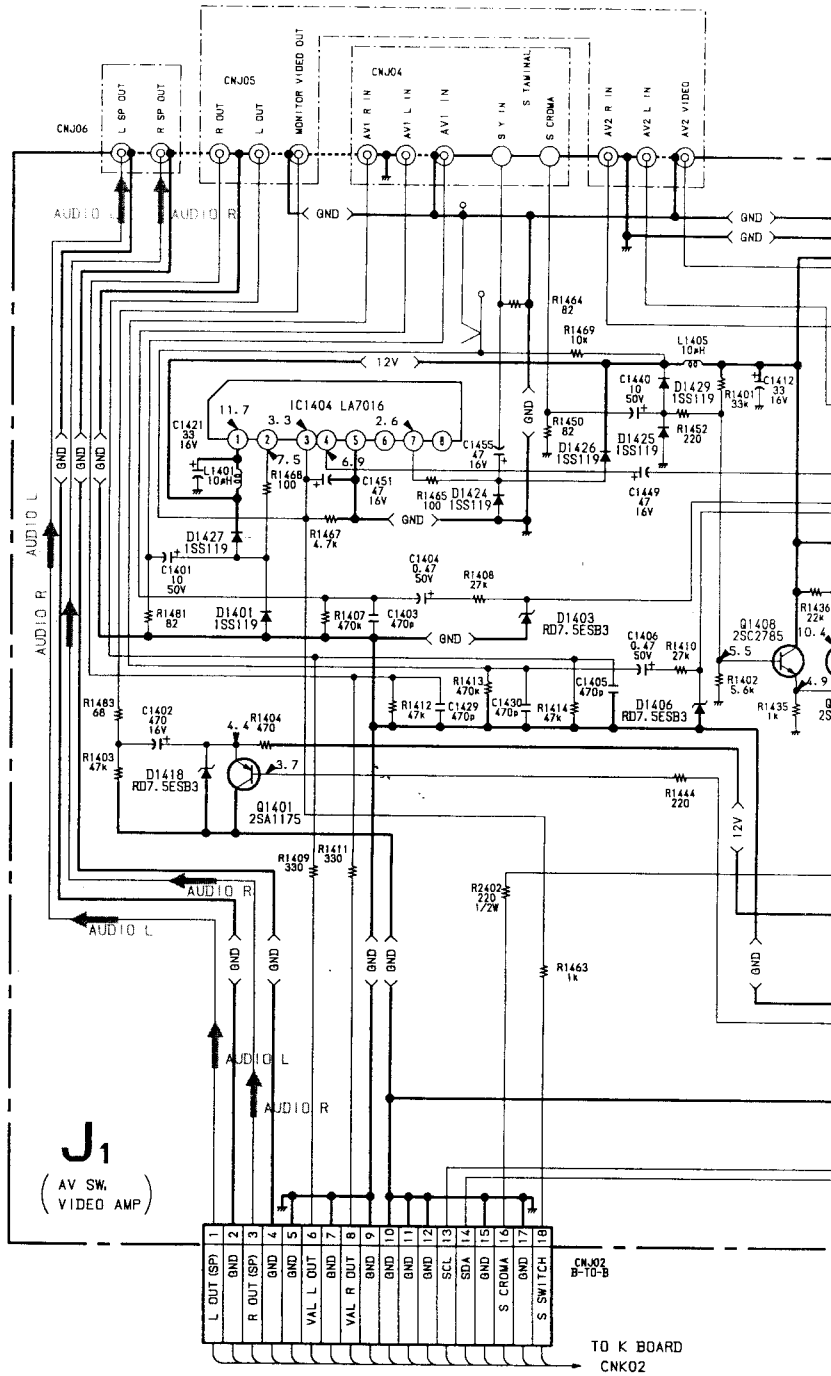
(H)	③ 0.8 Vp-p (H)	④ 0.24 Vp-p (4MHz)


K
SYSTEM CONTROL . MEMORY.
AUDIO CONTROL.
SURROUND PROCESSER .
TO J1 BOARD
CNJ02
TO P BOARD
CNP901
TO B BOARD
CNB04
TO J1 BOARD
CNJ01
AUDIO L
AUDIO R
GND
12V
35V
7V
SURROUND
IC203 LM1875T
IC204 LM1875T
IC202 μPC324C SURROUND PROCESSER
Q201 2SC2785 MUTE-S
Q202 2SC2785 MUTE-6
Q204 2SC2785 BUFFER-L
Q205 DTC144ES
Q206 2SK105A-30 SURROUND-SW2
D205 1SS119 PROTECT
D206 1SS119 PROTECT
D207 1SS119 PROTECT
D208 1SS119 PROTECT
D007 1SS119 STOPPER
D008 1SS119
D012 1SS119 STOPPER
D013 1SS119 STOPPER
D201 RD9.1ESB3 9.1V-REG
D202 RD9.1ESB3 9.1V-REG
D011 RD3.9ES-B1 3.5V-REG
Q001 2SA1175 RESET
Q002 2SC2785 PULS-AMP
Q014 DTC144ES S-SW
IC002 MB89009-103
IC003 PCD8582
X001
L001 33μH
L002 47μH
CNK02 B-TO-B
L OUT (SP)
GND (L OUT)
R OUT (SP)
GND (R OUT)
GND (VAL)
VAL L OUT
(VAL GND)
VAL R OUT
GND
NC
NC
GND
SCL
SDA
GND
S CROMA
GND
S SWITCH
CNK13 S6B-H
CS
CLK
DATA
GND
7V
ST-BY
CNK14 S4R-H
VDW
HDW
GND
C BKG
CNK01 B-TO-B
ATV L OUT
ATV R OUT
GND AU
ATV L IN
ATV R IN
GND AU
R
G
B
GND


4
5
6
7
8
9
10
11
12
IC201 TDA6200 AUDIO-CONTROL
IC202 μPC324C SURROUND PROCESSER
IC1001 M37100M8-616SP
IC1002 LA7016
IC1003 PCD8582
IC1004 LA7016
IC1005 APC574J 33V-REG
IC1007 LA7016
Q001 2SA1175 RESET
Q002 2SC2785 PULS-AMP
Q003 DTC144ES PULS-AMP
Q004
Q005 2SA1175 SYNC-BUFF-1
Q006 2SK105A-30 SURROUND-SW2
Q007 2SC2785 MUTE-3
Q008 2SA1175-F MUTE-1
Q009 DTC144ES PULS-AMP
Q010
Q011
Q012
Q013 DTC144ES AV-SW
Q014 DTC144ES S-SW
Q201 2SC2785 MUTE-5
Q202 2SC2785 MUTE-6
Q203 2SC2785 BUFFER-R
Q204 2SC2785 BUFFER-L
Q205 DTC144ES
Q207 2SC2785 MUTE-3
Q209 DTC144ES MUTE-4
Q220 2SC2785 MUTE-2
D001 1SS119 STORPER
D002 RD5.6ES-B2
D003 RD3.9ES-B1 3.5V-REG
D004 RD7.5ES-B3 7.5V-REG
D005 1SS119 PROTECT
D006 1SS119 PROTECT
D007 1SS119 STORPER
D008 1SS119 DRIVER
D009 1SS119 DRIVER
D010 1SS119 STOPPER
D011 1SS119 STOPPER
D012 1SS119 STOPPER
D013 1SS119 STOPPER
X001
12V
5V
7V
35V
GND
AUDIO L
AUDIO R
SURROUND


8
9
10
11
12
13
14
15
IC201
TDA6200
AUDIO-CONTROL
IC202
PC324C
SURROUND
PROCESSER
IC001
M37100MB-616SP
IC004
LA7016
IC007
LA7016
IC006
MSM5258RS
IC005
PC574J
33V-REG
D204
RD7.5ESB3
7.5V-REG
D203
RD7.5ESB3
7.5V-REG
Q203
2SC2785
BUFFER-R
Q206
2SK105A-30
SURROUND-SW2
Q220
2SC2785
MUTE-2
Q207
2SC2785
MUTE-3
Q208
2SA1175-F
MUTE-1
Q209
DTC144ES
MUTE-4
D209
1SS119
DRIVER
Q013
DTC144ES
AV-SW
Q009
DTC144ES
PULS-AMP
Q005
2SA1175
SYNC-BUFF-1
Q007
2SC2785
Q019
2SC2785
Q015
DTC144ES
Q016
DTC144ES
D002
RD5.6ES-B2
X002
AUDIO R
AUDIO L
12V
7V
5V
GND
35V
135V
TO CON
7P
CNK16
S7W-H
1 B
2 A
3 NC
4 RESP LED
5 SIRCS
6 5V
7 GND
CNK18
S4W-H
4 KI 1
3 KI 0
2 KO 0
1 NC
TO J1 BO
CNJ07
TO D BO
CND2
CNK09
S11W-H
1 MAIN VIDEO
2 GND
3 50/60 Hz
4 SCP
5 HAFC
6 +BLK
7 PIX ABL
8 BRT ABL
9 H PULS
10 V PULS
11 GND
TO F1 BO
CNFC
CNK08
S10W-H
1 135V
2 NC
3 GND
4 GND
5 ST-BY
6 7V
7 15V A
8 12V
9 12V
10 GND
TO V BOA
CNV02
1 15V A
2 7V
3 ST-BY
4 GND



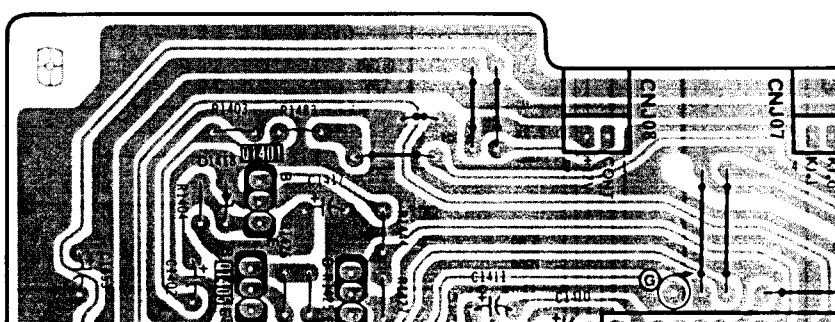


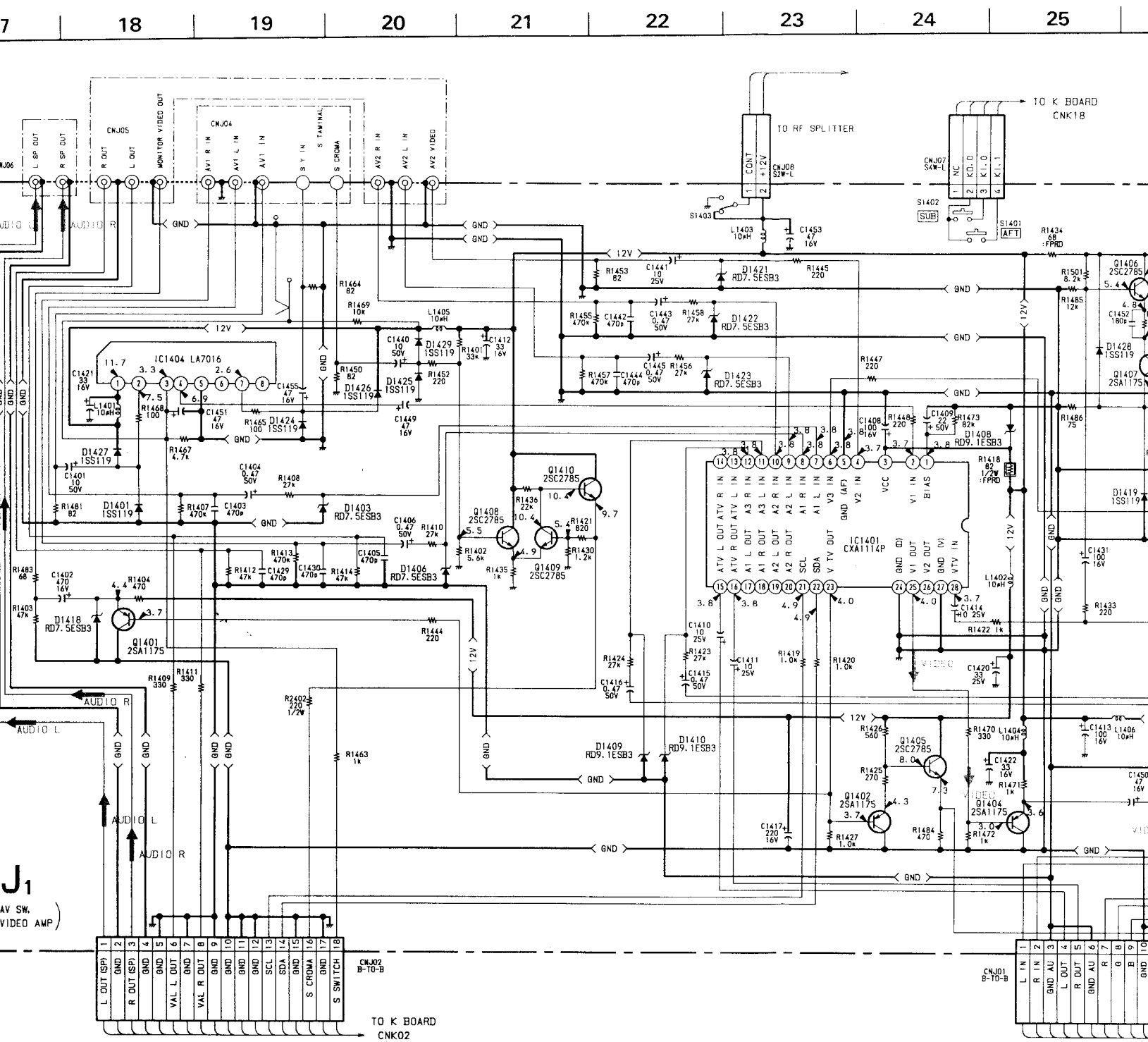
J1 [AV SW, VIDEO AMP]

PRINTED WIRING BOARD

–Conductor Side–

– J1 Board –



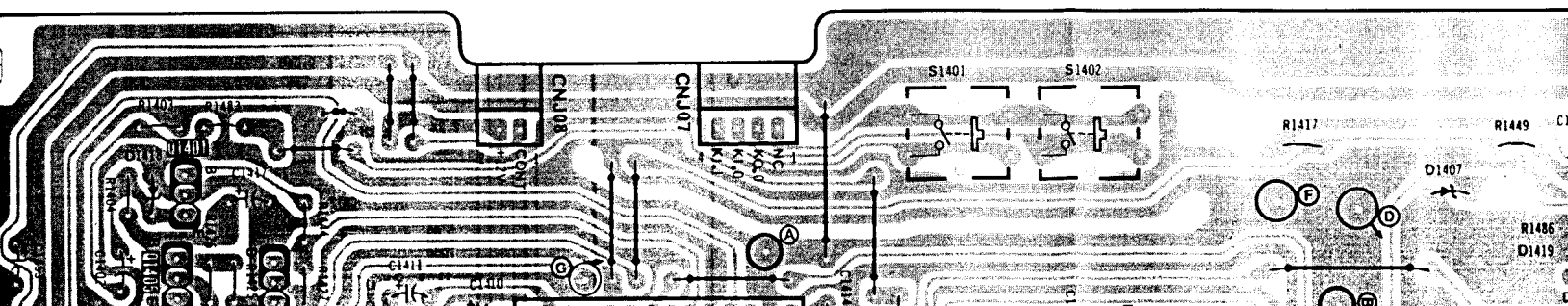


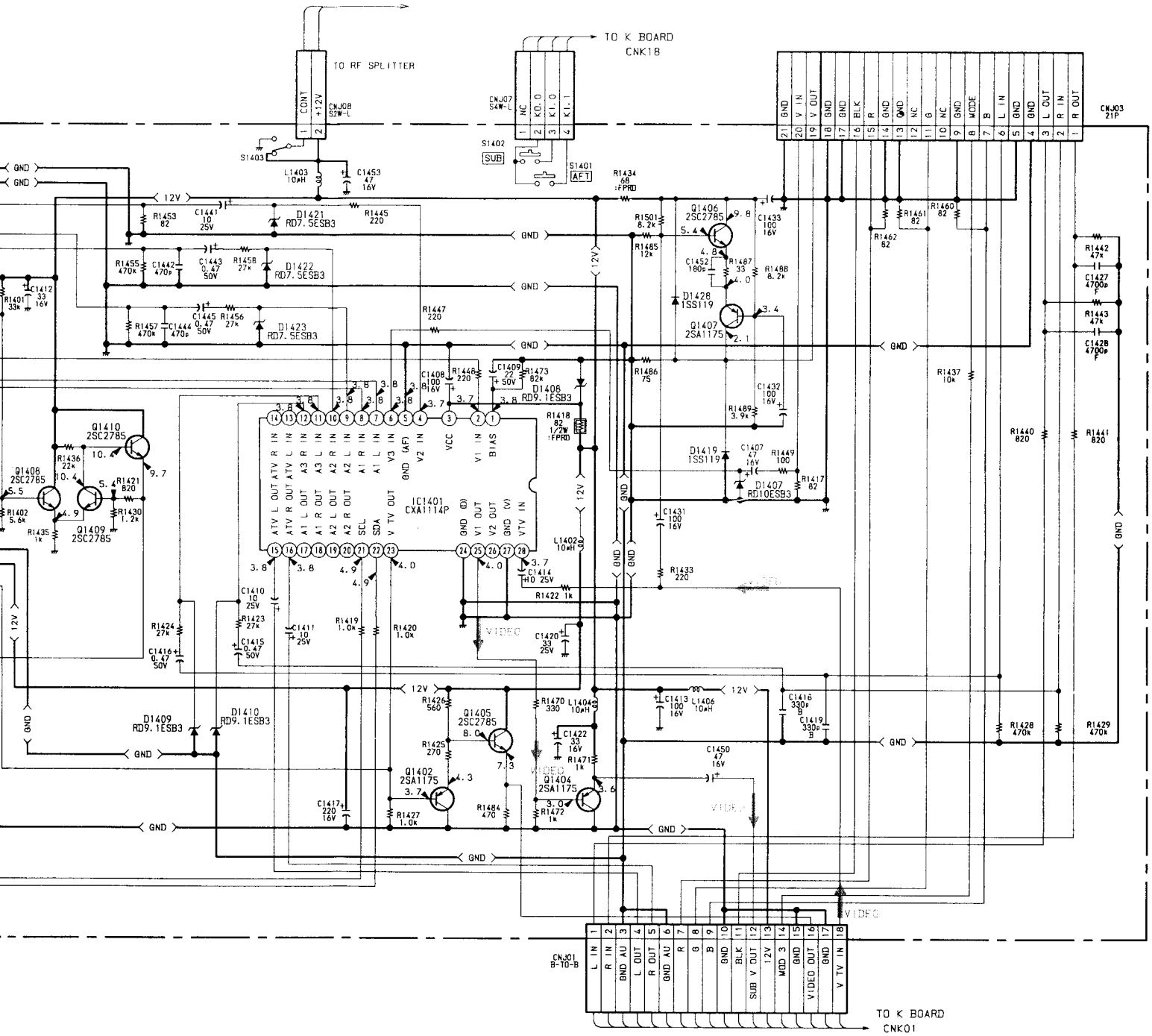
1 [AV SW, VIDEO AMP]

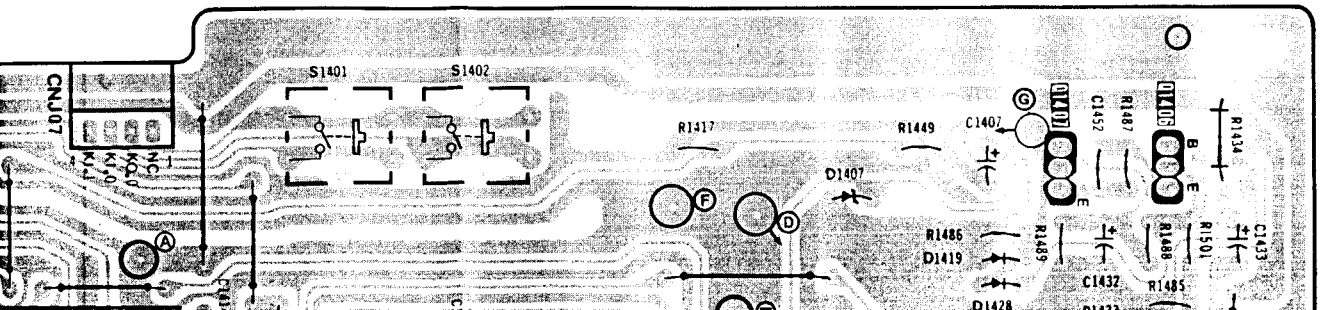
TED WIRING BOARD

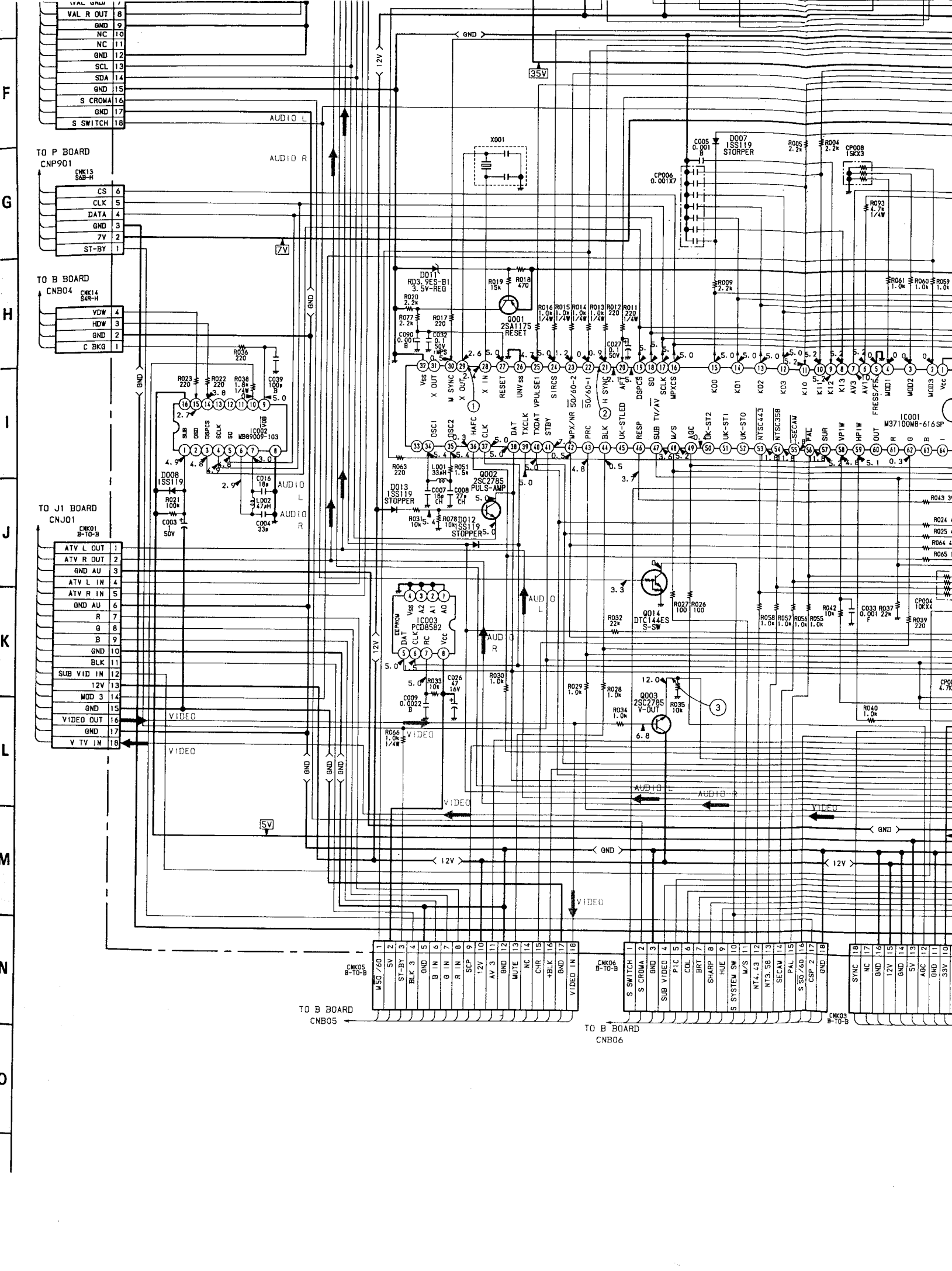
nductor Side—

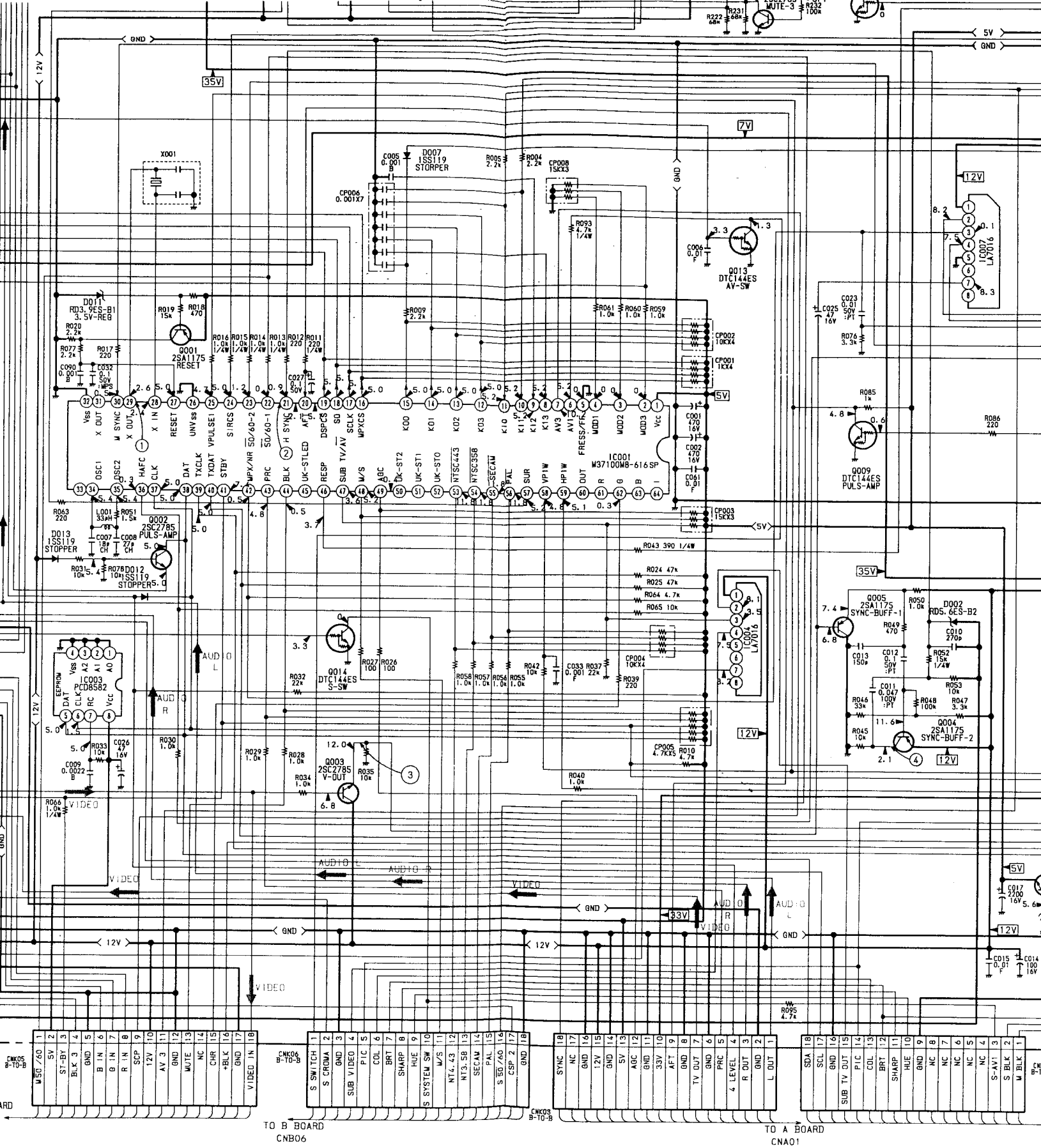
1 Board —

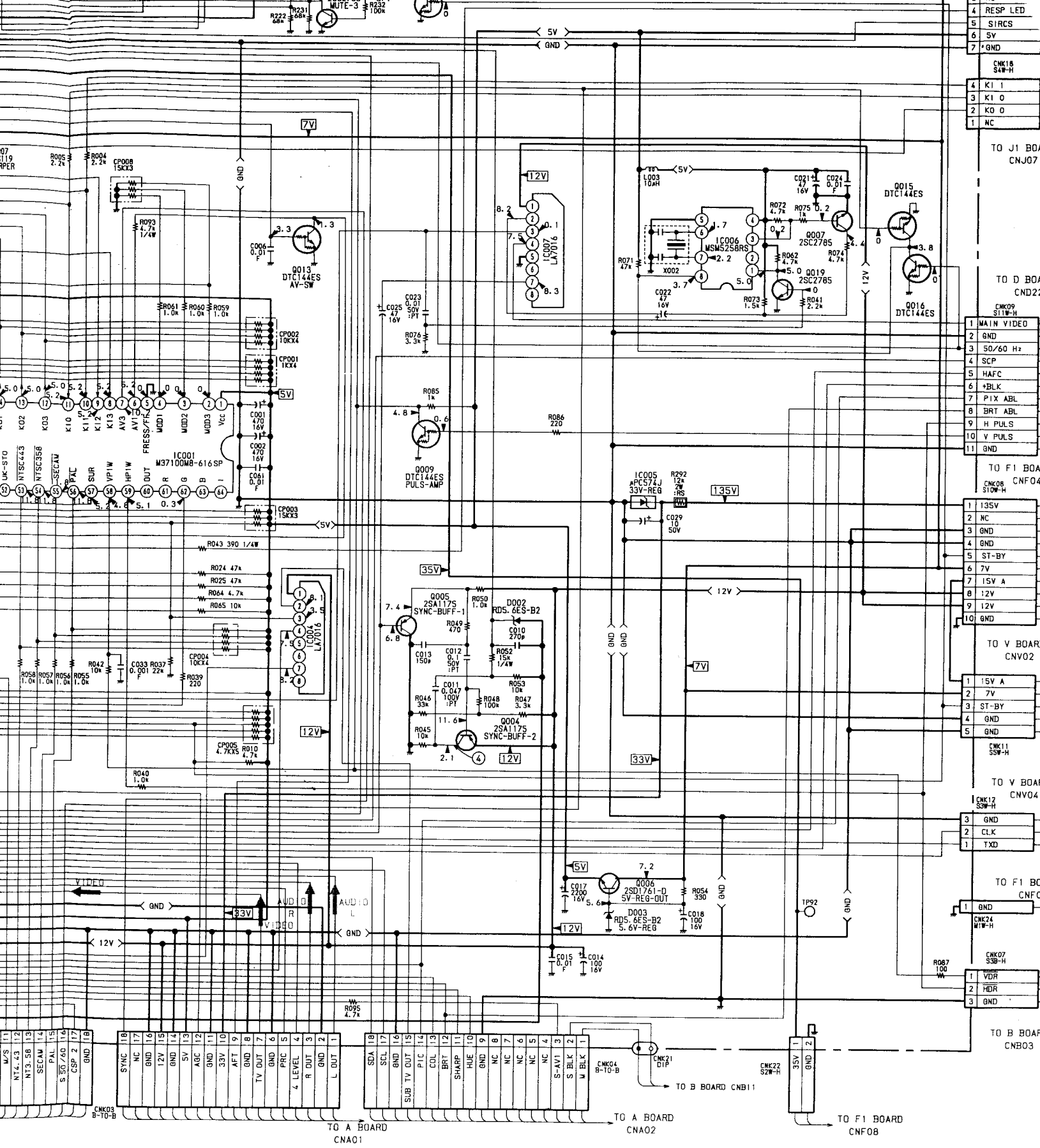


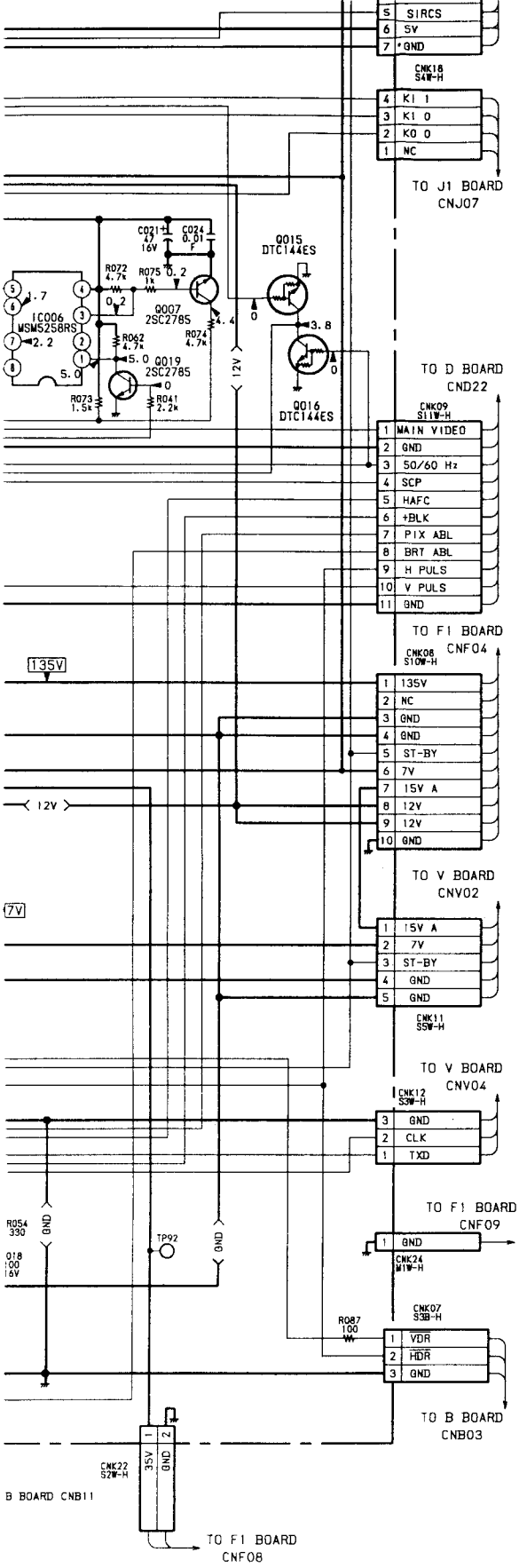

TO RF SPLITTER
CNJ08 S2W-L
CONT
+12V
TO K BOARD
CNK18
CNJ07 S4W-L
NC
KO. 0
KI. 0
KI. 1
S1402
SUB
S1401
AFT
S1403
L1403 10μH
C1453 47 16V
CNJ03 21P
GND
12V
R1453 82
C1441 10 25V
D1421 RD7.5ESB3
R1445 220
R1455 470k
C1442 470p
C1443 0.47 50V
R1458 27k
D1422 RD7.5ESB3
R1457 470k
C1444 470p
C1445 0.47 50V
R1456 27k
D1423 RD7.5ESB3
R1447 220
C1412 33 16V
R1401 33k
Q1410 2SC2785
Q1408 2SC2785
Q1409 2SC2785
R1436 22k
R1421 820
R1430 1.2k
R1402 5.6k
R1435 1k
IC1401 CXA1114P
ATV L OUT
ATV R OUT
ATV L IN
ATV R IN
A1 L OUT
A1 R OUT
A2 L OUT
A2 R OUT
A3 L IN
A3 R IN
A1 L IN
A1 R IN
A2 L IN
A2 R IN
SCL
SDA
V TV OUT
V3 IN
GND (AF)
V2 IN
VCC
V1 IN
BIAS
GND (D)
V1 OUT
V2 OUT
GND (V)
VTV IN
C1408 100 16V
R1468 220
C1409 22 + 50V
R1473 82k
D1406 RD9.1ESB3
R1418 82 1/2W FPRD
L1402 10μH
C1414 10 25V
R1422 1k
C1410 10 25V
R1423 27k
C1411 10 25V
R1419 1.0k
R1420 1.0k
R1424 27k
C1415 0.47 50V
C1416 0.47 50V
C1420 33 25V
VIDEO
R1426 560
Q1405 2SC2785
R1425 270
Q1402 2SA1175
R1427 1.0k
C1417 220 16V
R1484 470
R1470 330
L1404 10μH
C1422 33 16V
R1471 1k
Q1404 2SA1175
R1472 1k
D1409 RD9.1ESB3
D1410 RD9.1ESB3
C1413 100 16V
L1406 10μH
C1418 330p
C1419 330p
C1450 47 16V
R1428 470k
R1429 470k
R1501 8.2k
Q1406 2SC2785
R1485 12k
C1452 180p
R1487 33
R1488 8.2k
D1428 1SS119
Q1407 2SA1175
R1486 75
C1432 100 16V
R1489 3.9k
D1419 1SS119
C1407 47 16V
R1449 100
D1407 RD10ESB3
R1417 82
C1431 100 16V
R1433 220
R1434 68 FPRD
R1461 82
R1460 82
R1462 62
R1442 47k
C1427 4700p F
R1443 47k
C1428 4700p F
R1437 10k
R1440 820
R1441 820
CNJ01 B-10-B
L IN
R IN
GND AU
L OUT
R OUT
GND AU
R
G
B
GND
BLK
SUB V OUT
12V
MOD 3
GND
VIDEO OUT
GND
V TV IN
TO K BOARD
CNK01

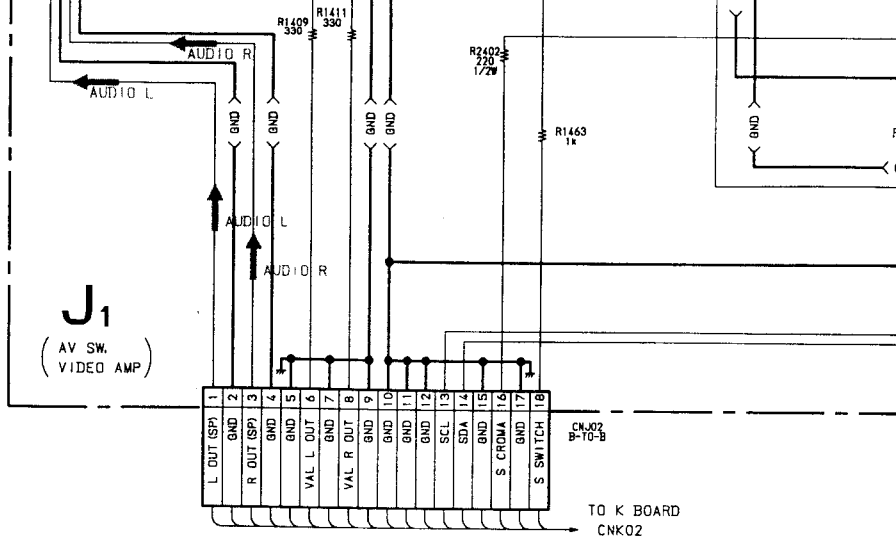

CNJ07
S1401
S1402
R1417
R1449
C1407
D1407
R1486
D1419
R1489
C1432
R1485
R1428
R1487
R1434
R1501
C1433


VAL R OUT 8
GND 9
NC 10
NC 11
GND 12
SCL 13
SDA 14
GND 15
S CROMA 16
GND 17
S SWITCH 18
AUDIO L
AUDIO R
TO P BOARD
CNP901
CMK13 S6B-H
CS 6
CLK 5
DATA 4
GND 3
7V 2
ST-BY 1
7V
TO B BOARD
CNB04
CMK14 S4R-H
VDW 4
HDW 3
GND 2
C BKG 1
TO J1 BOARD
CNJ01
CNK01 B-TO-B
ATV L OUT 1
ATV R OUT 2
GND AU 3
ATV L IN 4
ATV R IN 5
GND AU 6
R 7
G 8
B 9
GND 10
BLK 11
SUB VID IN 12
12V 13
MOD 3 14
GND 15
VIDEO OUT 16
GND 17
V TV IN 18
GND
12V
35V
5V
VIDEO
AUDIO L
AUDIO R
X001
D007 1SS119 STOPPER
D011 RD3.9ES-B1 3.5V-REG
Q001 2SA1175 RESET
D008 1SS119
D013 1SS119 STOPPER
D012 1SS119 STOPPER
Q002 2SC2785 PULS-AMP
Q003 2SC2785 V-OUT
Q014 DTC144ES S-SW
IC001 M37100MB-616SP
IC002 MB89009-103
IC003 PCD8582
CP006 0.001X7
CP008 15KX3
CP004 10KX4
TO B BOARD
CNB05
CMK05 B-TO-B
W50/60
5V
ST-BY
BLK 3
GND
B IN
G IN
R IN
SCP
12V
AV 3
GND
MUTE
NC
CHR
+BLK
GND
VIDEO IN
CNK06 B-TO-B
S SWITCH
S CROMA
GND
SUB VIDEO
P/C
COL
BRT
SHARP
HUE
S SYSTEM SW
W/S
NT4.43
NT3.58
SECAM
PAL
S 50/60
CSP 2
GND
TO B BOARD
CNB06
CNK03 B-TO-B
SYNC
NC
GND
12V
GND
5V
AGC
GND
33V


IC001
M37100M8-616SP
IC002
PCD8582
IC003
LA7016
IC004
LA7016
IC007
LA7016
Q001
2SA1175
RESET
Q002
2SC2785
PULS-AMP
Q003
2SC2785
V-OUT
Q004
2SA1175
SYNC-BUFF-2
Q005
2SA1175
SYNC-BUFF-1
Q009
DTC144ES
PULS-AMP
Q013
DTC144ES
AV-SW
Q014
DTC144ES
S-SW
D002
RD5.6ES-B2
D007
1SS119
STOPPER
D011
RD3.9ES-B1
3.5V-REG
D012
1SS119
STOPPER
D013
1SS119
STOPPER
X001
MUTE-3
GND
5V
7V
12V
35V
33V
VIDEO
AUDIO L
AUDIO R
TO B BOARD
CNB06
TO A BOARD
CNA01


5V
GND
7V
12V
35V
135V
33V
IC001 M37100M8-616SP
IC004 LA7016
IC005 APC574J 33V-REG
IC006 MSM5258RS
IC007 LA7016
Q001 2SA1175 SYNC-BUFF-1
Q002 2SA1175 SYNC-BUFF-2
Q003 RDS.6ES-B2 5.6V-REG
Q004 2SA1175 SYNC-BUFF-2
Q005 2SA1175 SYNC-BUFF-1
Q006 2SD1761-D 5V-REG-OUT
Q007 2SC2785
Q009 DTC144ES PULS-AMP
Q013 DTC144ES AV-SW
Q015 DTC144ES
Q016 DTC144ES
Q019 2SC2785
D002 RDS.6ES-B2
D003 RDS.6ES-B2 5.6V-REG
X002
L003 10μH
TP92
VIDEO
AUDIO R
AUDIO L
CNK18 S4W-H
1 NC
2 KO 0
3 KI 0
4 KI 1
CNK19 S7W-H
1 MAIN VIDEO
2 GND
3 50/60 Hz
4 SCP
5 HAFC
6 +BLK
7 PIX ABL
8 BRT ABL
9 H PULS
10 V PULS
11 GND
CNK08 S10W-H
1 135V
2 NC
3 GND
4 GND
5 ST-BY
6 7V
7 15V A
8 12V
9 12V
10 GND
CNK11 S5W-H
1 15V A
2 7V
3 ST-BY
4 GND
5 GND
CNK12 S3W-H
1 TXD
2 CLK
3 GND
CNK24 M1W-H
1 GND
CNK07 S3B-H
1 VDR
2 HDR
3 GND
CNK22 S2W-H
1 35V
2 GND
CNK21 DIP
CNK04 B-TO-B
CNK03 B-TO-B
TO J1 BOARD CNJ07
TO D BOARD CND22
TO F1 BOARD CNF04
TO V BOARD CNV02
TO V BOARD CNV04
TO F1 BOARD CNF01
TO B BOARD CNB03
TO B BOARD CNB11
TO A BOARD CNA01
TO A BOARD CNA02
TO F1 BOARD CNF08



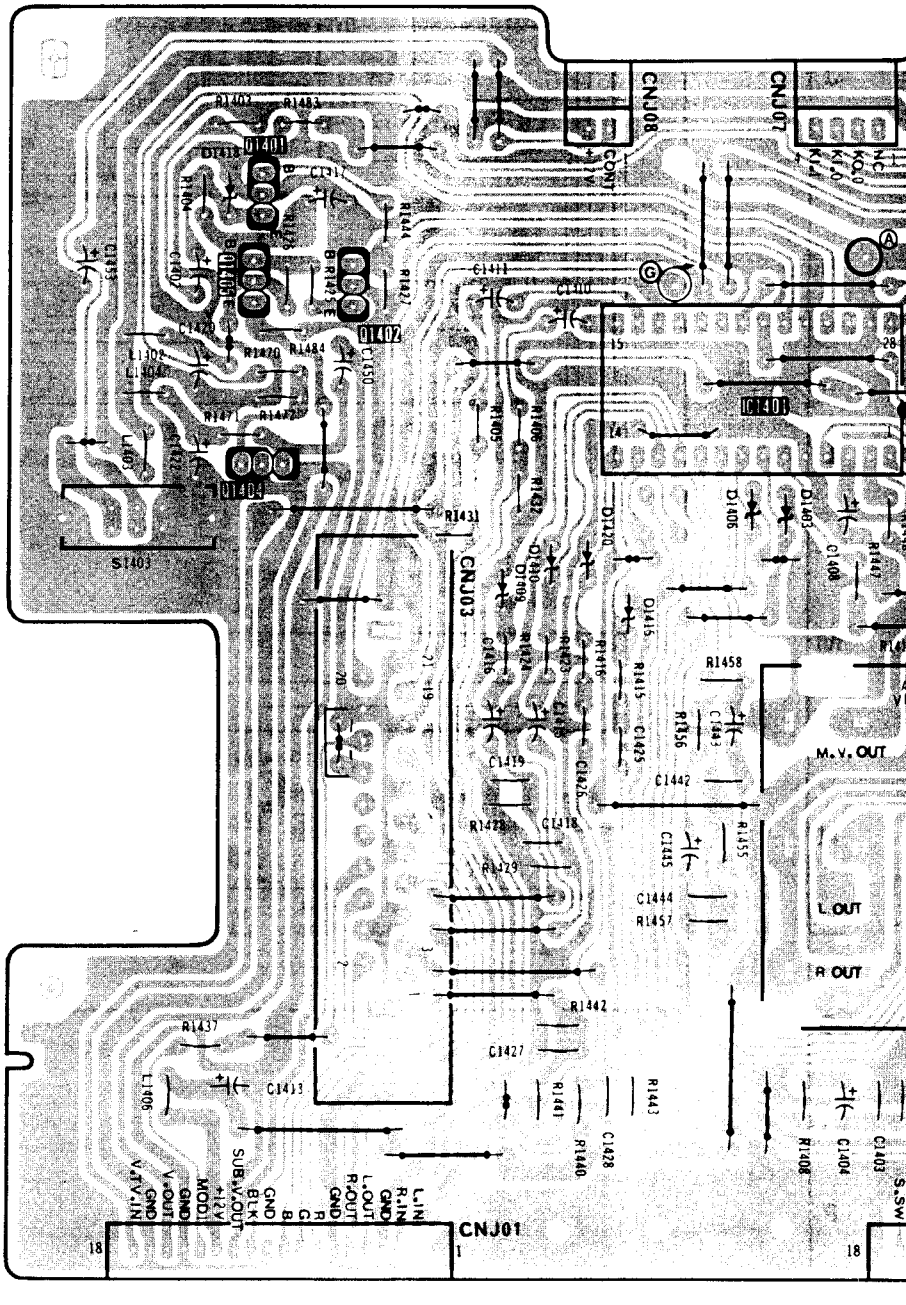


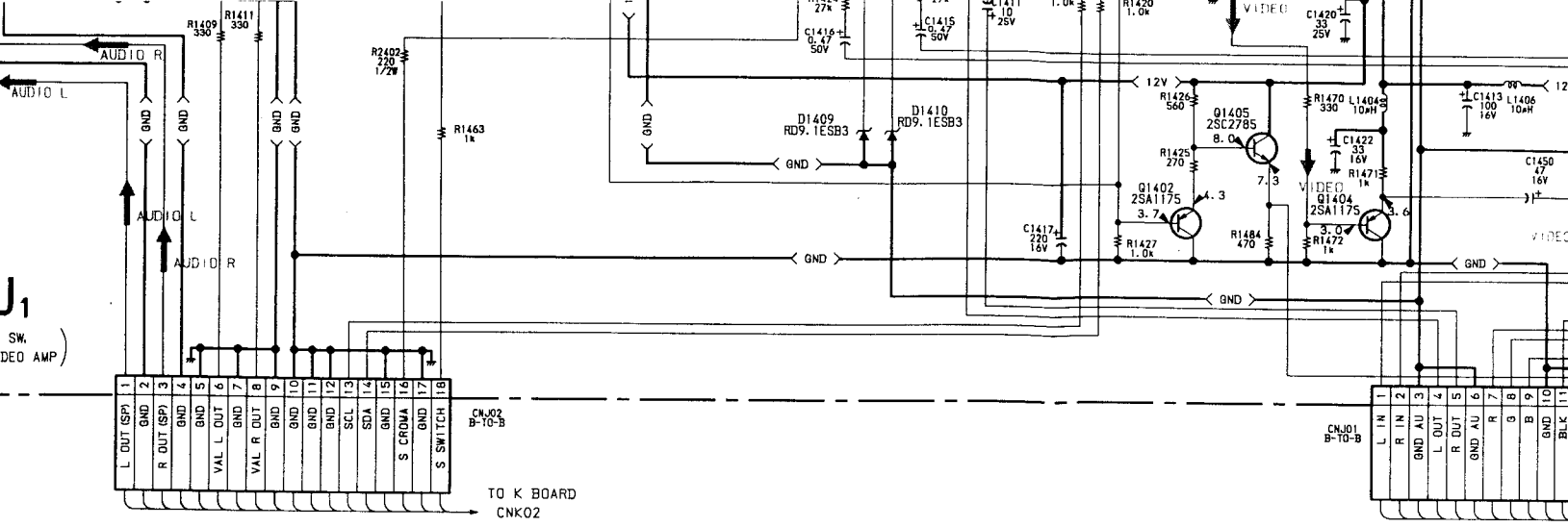
J1 [AV SW, VIDEO AMP]

PRINTED WIRING BOARD

–Conductor Side–

– J1 Board –



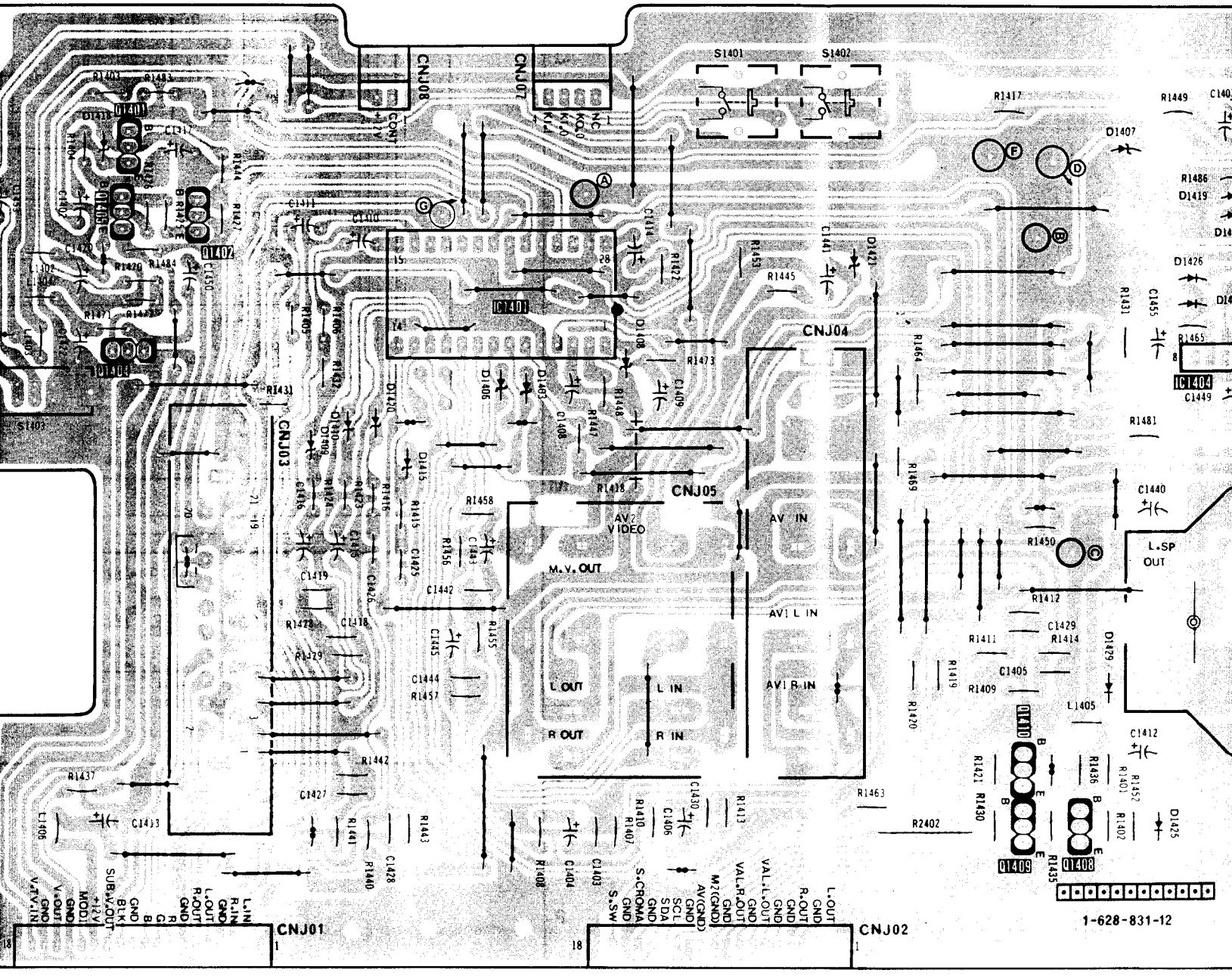


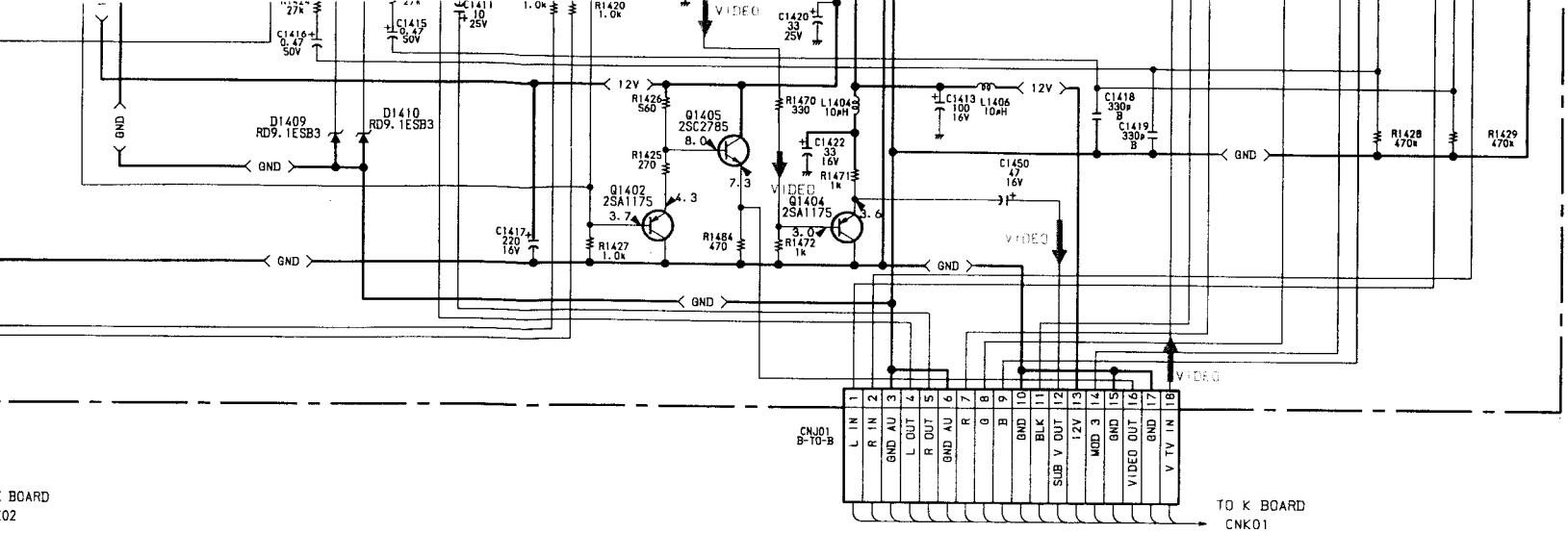
1 [AV SW, VIDEO AMP]

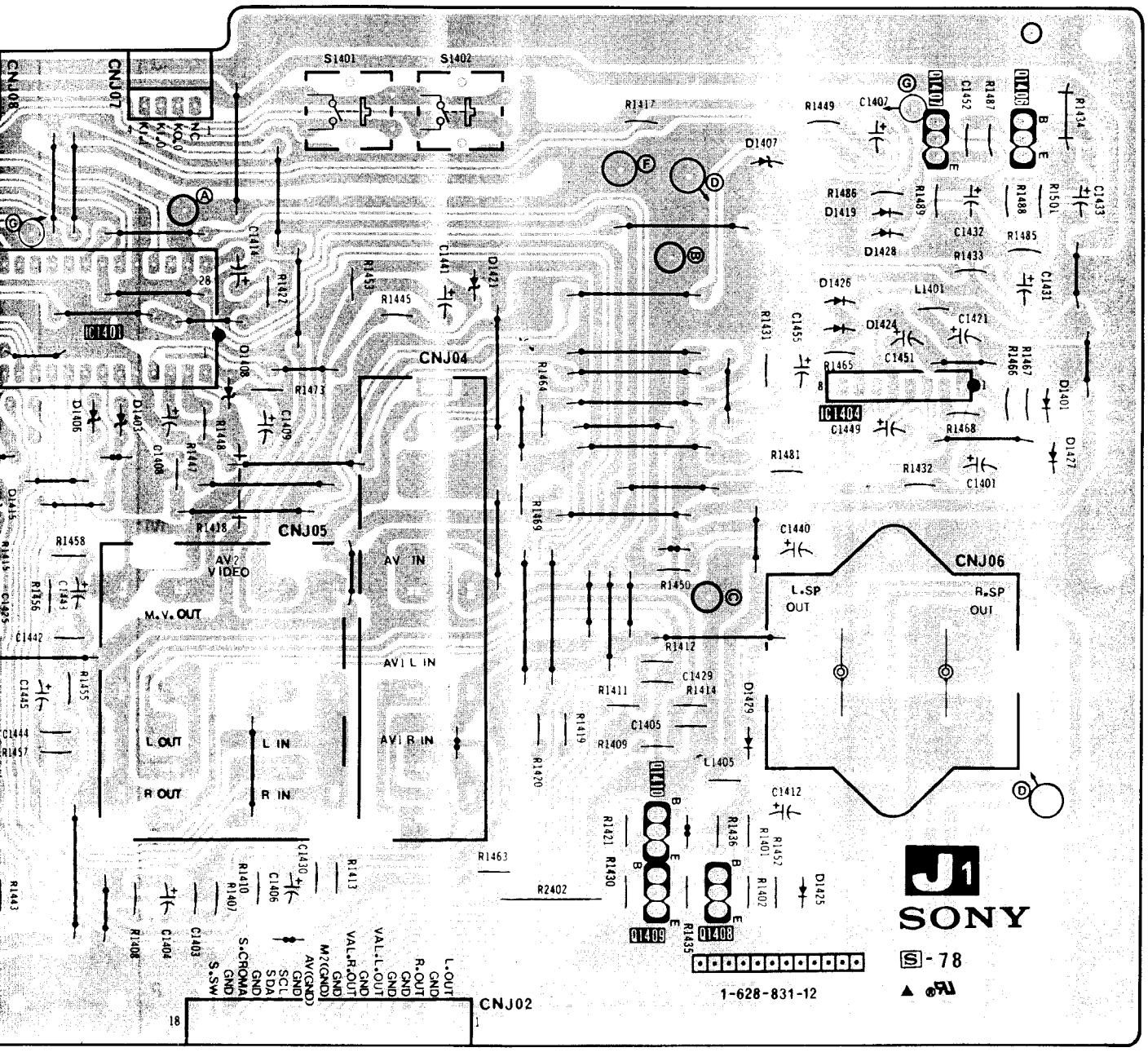
ED WIRING BOARD

luctor Side—

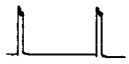
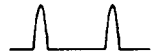
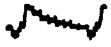
Board —




12V
GND
VIDEO
D1409
RD9.1ESB3
D1410
RD9.1ESB3
Q1405
2SC2785
Q1402
2SA1175
Q1404
2SA1175
L1404
10μH
L1406
10μH
CNJ01
B-TO-B
L IN
R IN
GND AV
L OUT
R OUT
GND AV
R
G
B
GND
BLK
SUB V OUT
12V
MOD 3
GND
VIDEO OUT
GND
V IN AV
TO K BOARD
CNK01


CNJ07
CNJ08
S1401
S1402
IC1401
IC1404
CNJ04
CNJ05
CNJ06
CNJ02
AV2 VIDEO
AV IN
M.V.OUT
AV1 L IN
AV1 R IN
L OUT
L IN
R OUT
R IN
L.SP OUT
R.SP OUT
L.OUT
GND
R.OUT
GND
VAL.L.OUT
GND
VAL.R.OUT
GND
M2(GND)
AV(GND)
GND
SCL
SDA
GND
S.CROMA
GND
S.SW
1-628-831-12
J1
SONY
S-78

● D BOARD WAVEFORM

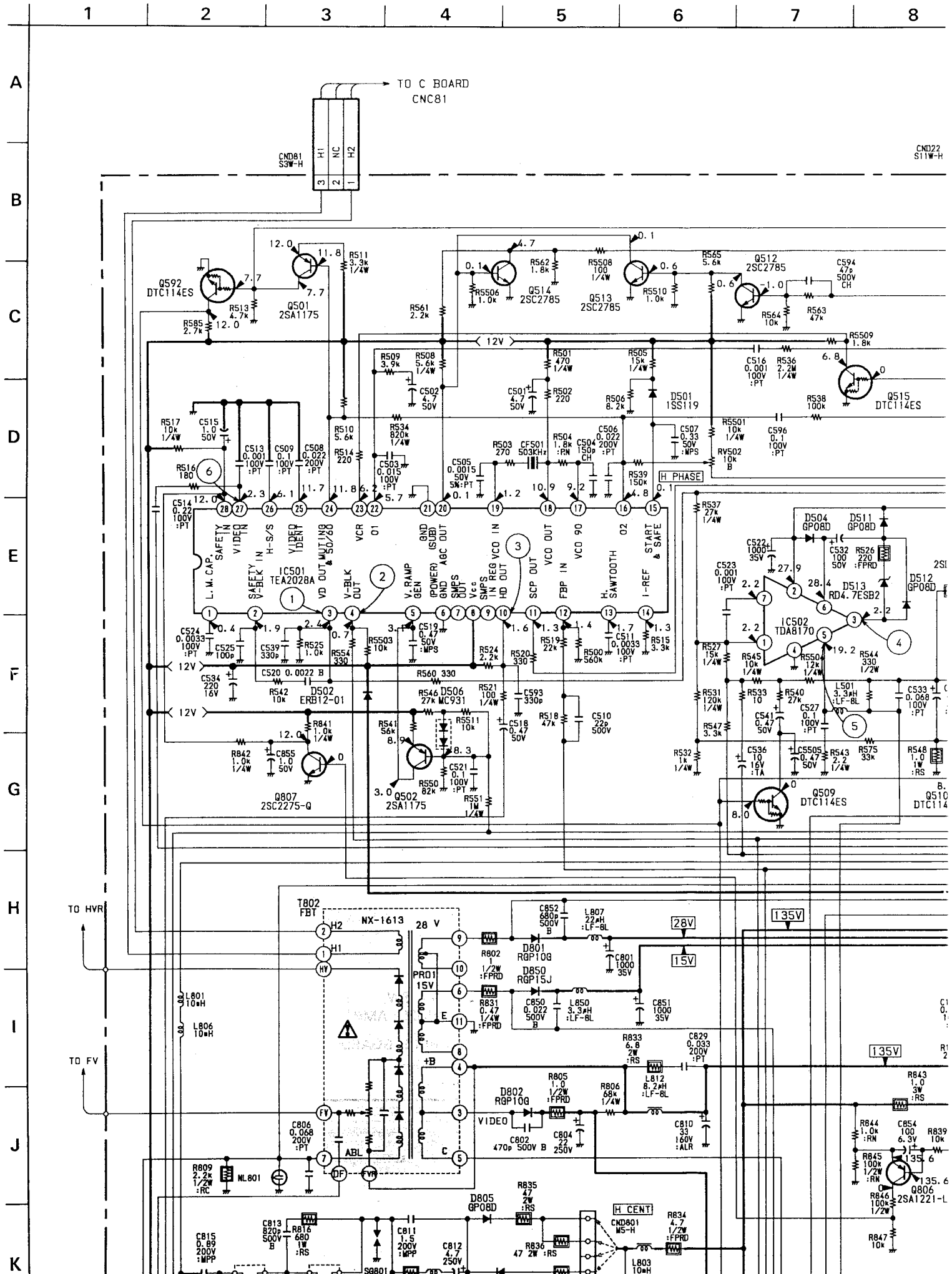
① 2.5 Vp-p (V)	② 10 Vp-p (V)	③ 3.7 Vp-p (H)	④  28 Vp-p (V)	⑤ 46 Vp-p (V)
⑥ 3.0Vp-p (H)	⑦ 3.0Vp-p (H)	⑧ 210Vp-p (H)	⑨ 13 Vp-p (H)	⑩  1200Vp-p (H)
⑪ 1.2Vp-p (H)	⑫  1.5Vp-p (H)			

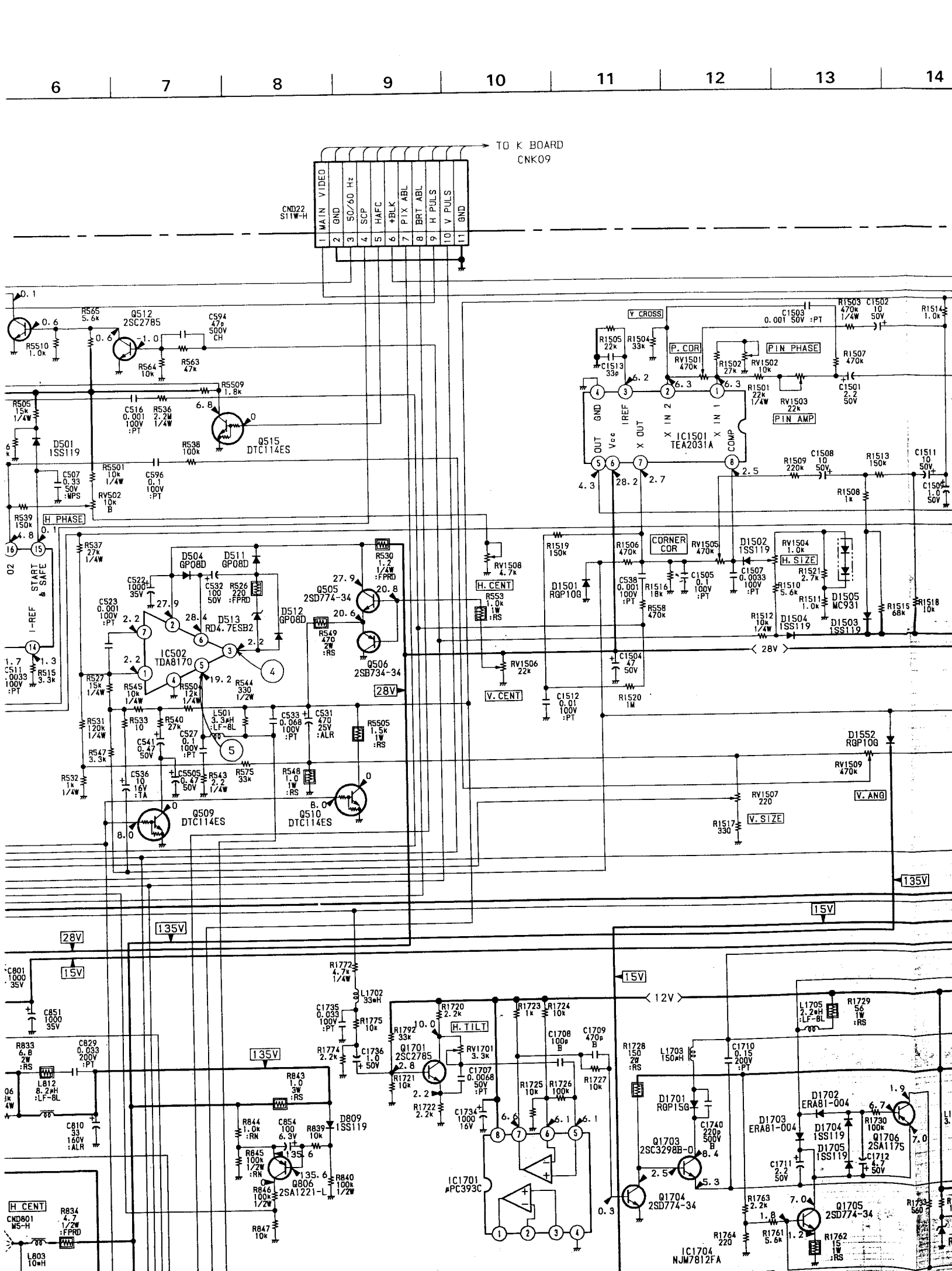
A
B
C
D
E
F
G
H
I
J
K

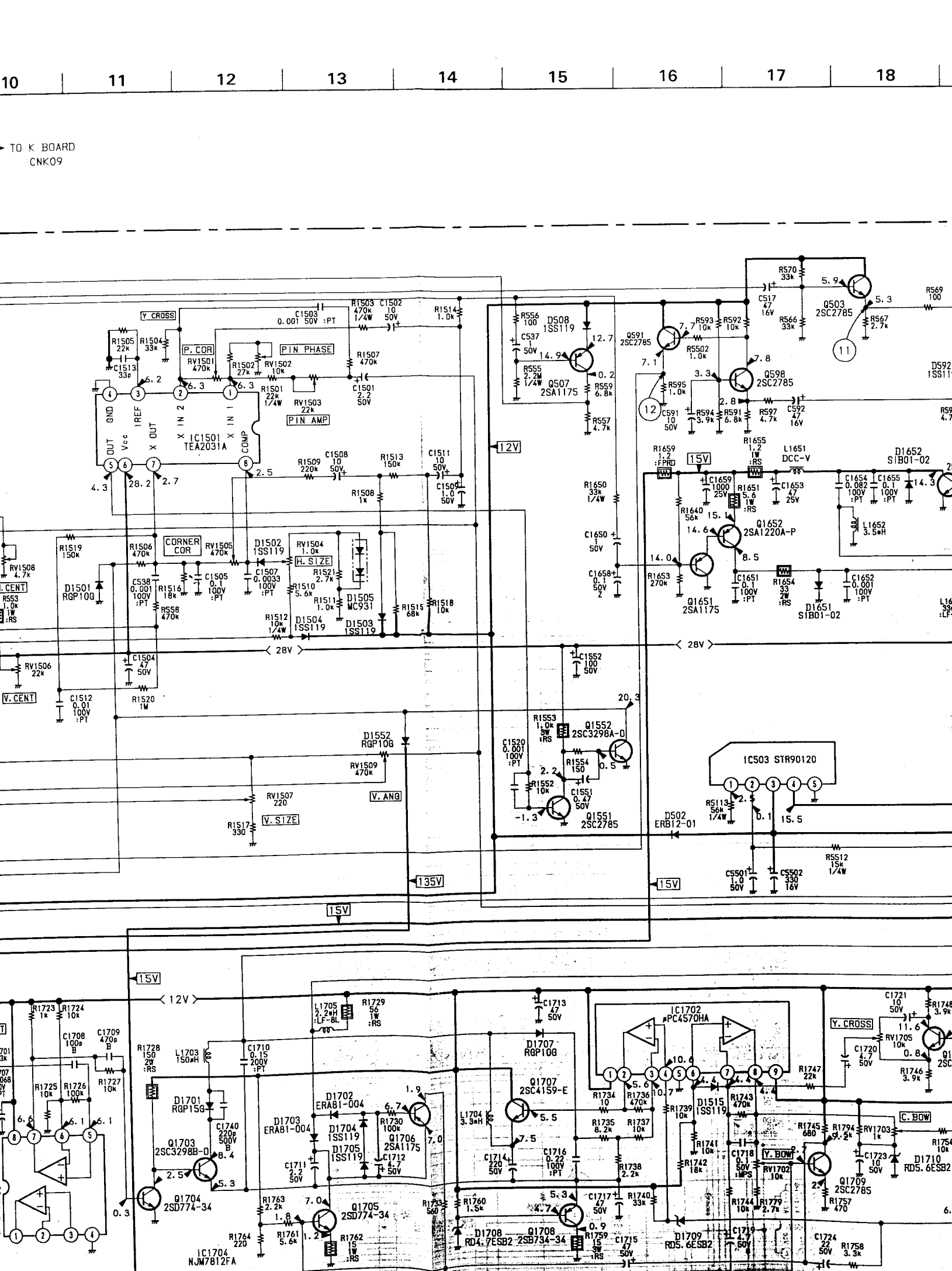
TO

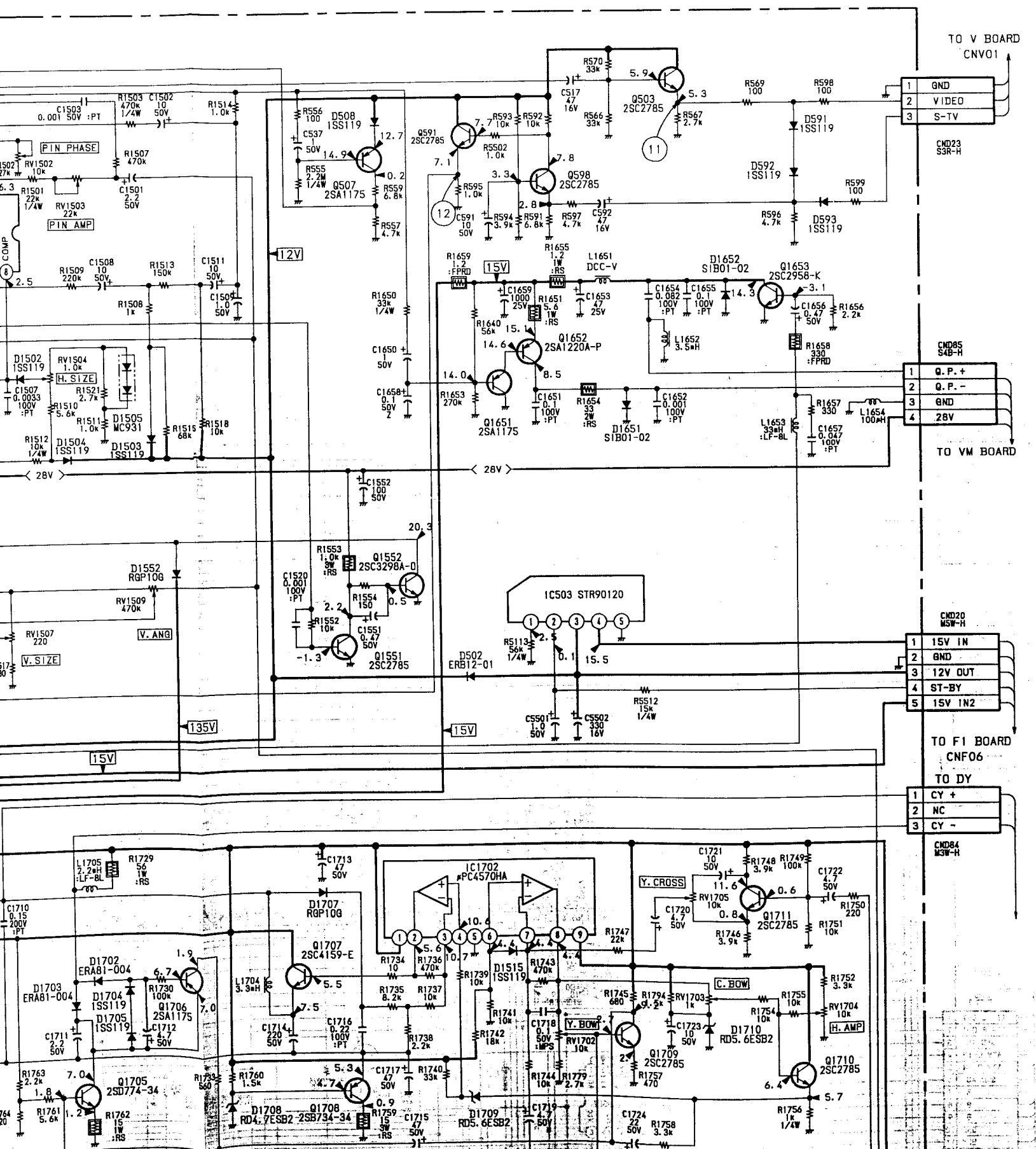
TO

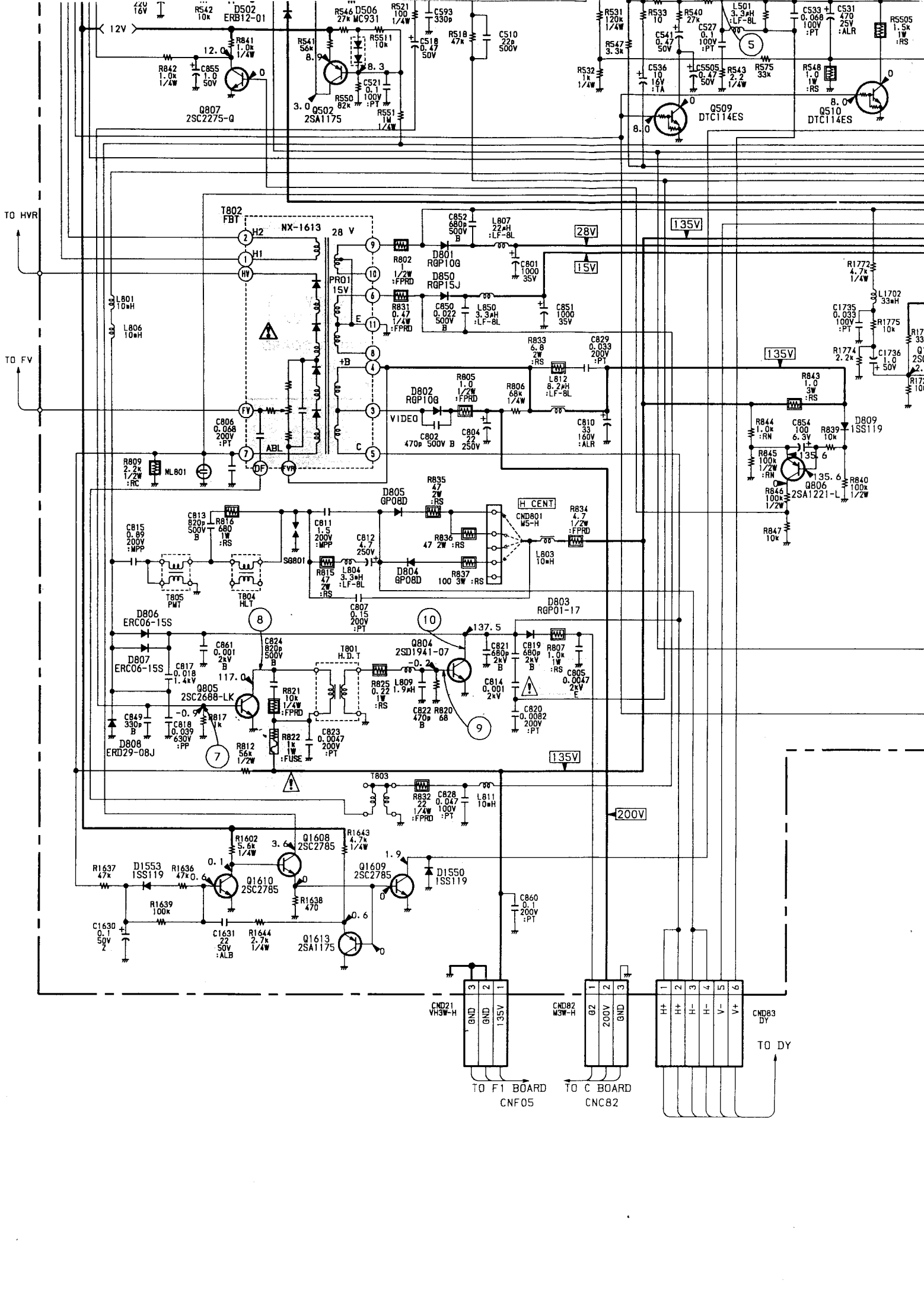
SCHEATIC DIAGRAM

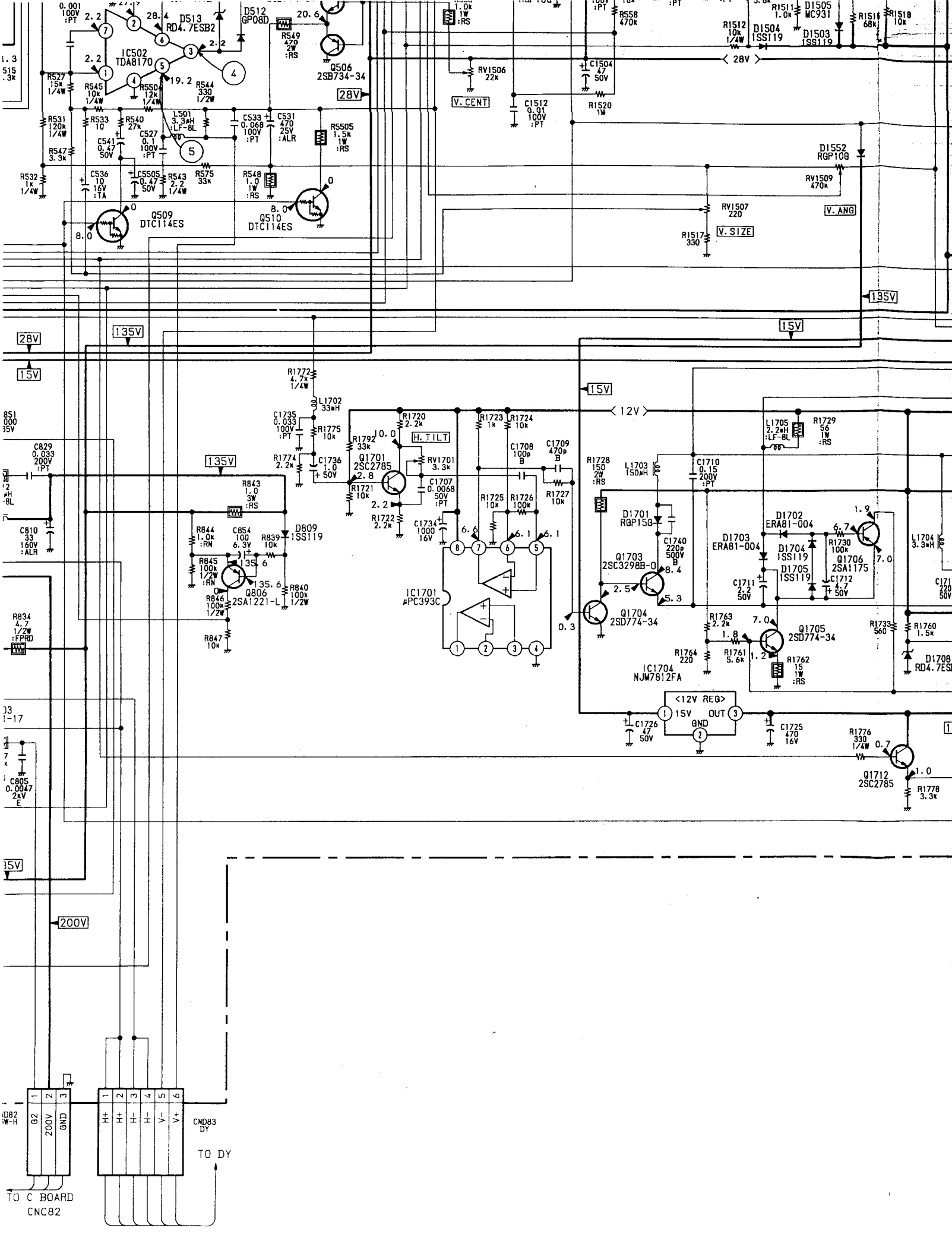


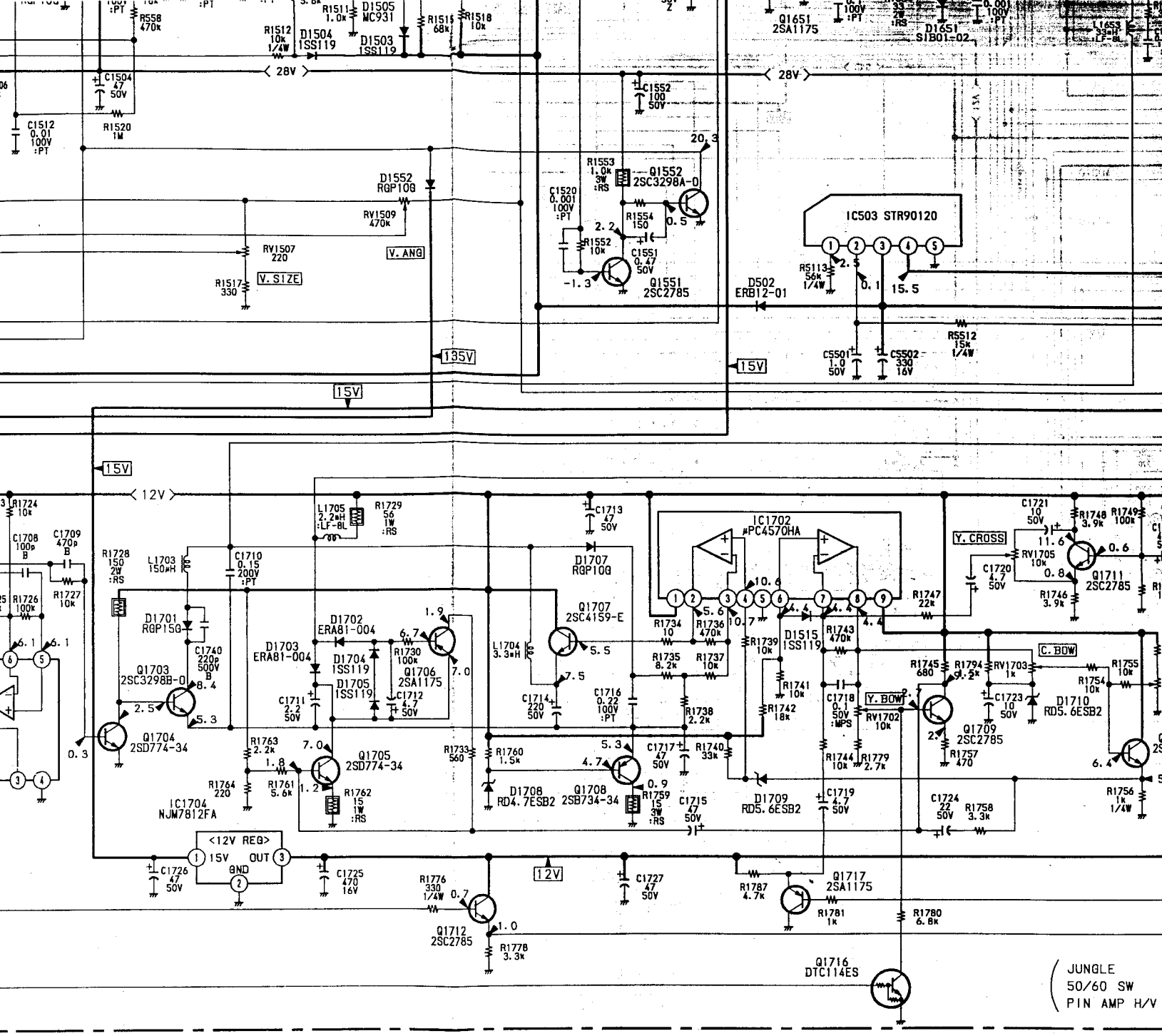

6
7
8
9
10
11
12
13
14
TO K BOARD
CNK09
CND22
S11W-H
1 MAIN VIDEO
2 GND
3 50/60 Hz
4 SCP
5 HAFC
6 +BLK
7 PIX ABL
8 BRT ABL
9 H PULS
10 V PULS
11 GND
Q512 2SC2785
Q515 DTC114ES
D501 1SS119
H PHASE
START & SAFE
I-REF
IC502 TDA8170
D504 GP08D
D511 GP08D
D512 GP08D
D513 RD4.7ESB2
Q505 2SD774-34
Q506 2SB734-34
Q509 DTC114ES
Q510 DTC114ES
L501 3.3μH :LF-8L
28V
135V
15V
12V
Y CROSS
P.COR
PIN PHASE
PIN AMP
IC1501 TEA2031A
H.CENT
V.CENT
CORNER COR
H.SIZE
V.SIZE
V.ANG
D1501 RGP10G
D1502 1SS119
D1503 1SS119
D1504 1SS119
D1505 MC931
D1552 RGP10G
H.TILT
IC1701 μPC393C
D1701 RGP15G
D1702 ERA81-004
D1703 ERA81-004
D1704 1SS119
D1705 1SS119
Q1701 2SC2785
Q1703 2SC3298B-O
Q1704 2SD774-34
Q1705 2SD774-34
Q1706 2SA1175
IC1704 NJM7812FA
D809 1SS119
Q806 2SA1221-L
CND801 M5-H

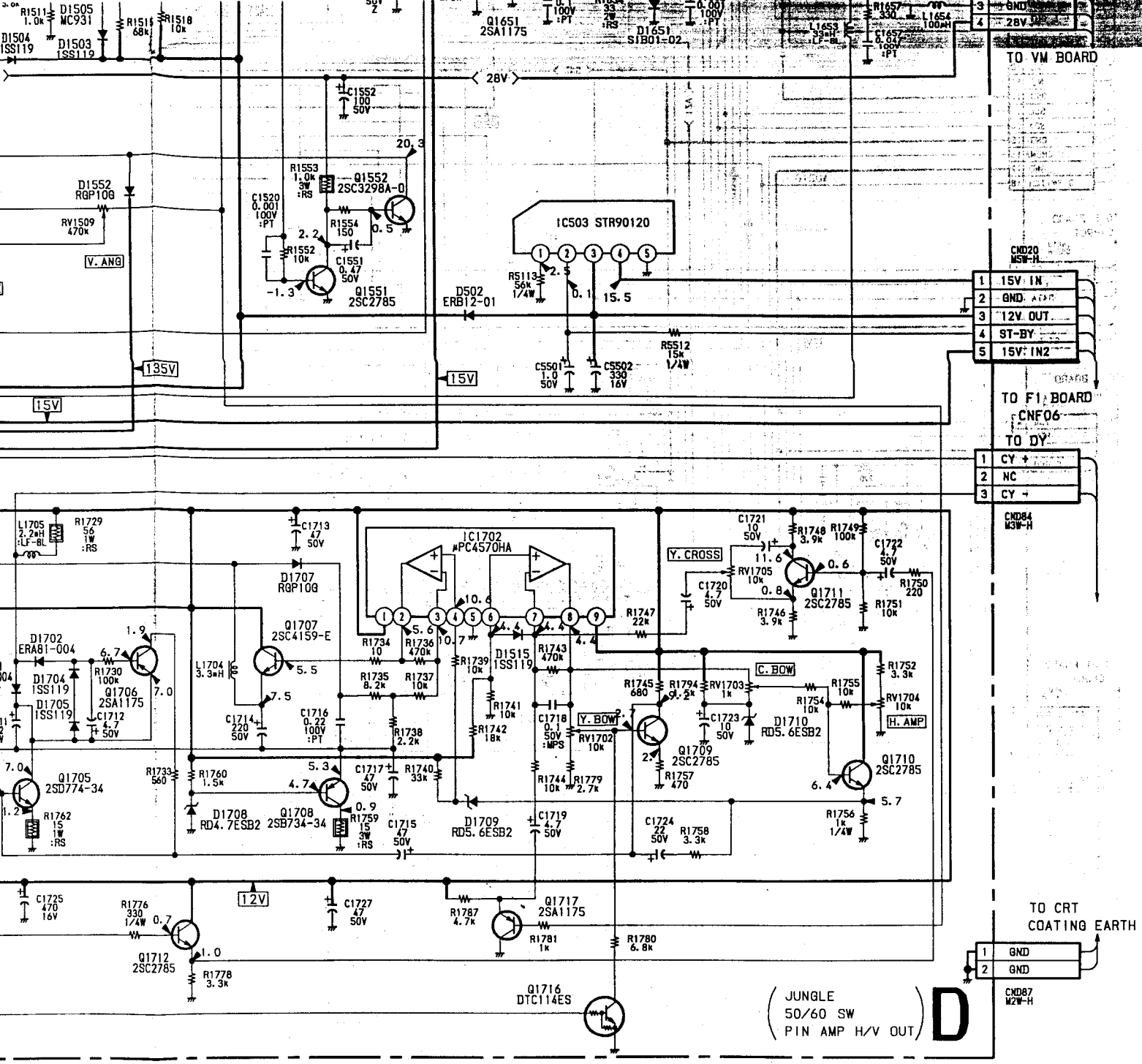

10
11
12
13
14
15
16
17
18
TO K BOARD
CNK09
Y CROSS
P. COR
PIN PHASE
PIN AMP
IC1501
TEA2031A
GND
IREF
X IN 2
X IN 1
OUT
Vcc
X OUT
COMP
CORNER COR
H. SIZE
V. CENT
V. ANG
V. SIZE
12V
15V
28V
135V
D1501 RGP10G
D1502 1SS119
D1503 1SS119
D1504 1SS119
D1505 MC931
D1552 RGP10G
D508 1SS119
Q507 2SA1175
Q591 2SC2785
Q503 2SC2785
Q598 2SC2785
Q1652 2SA1220A-P
Q1651 2SA1175
Q1552 2SC3298A-O
Q1551 2SC2785
D1652 SIB01-02
D1651 SIB01-02
D502 ERB12-01
IC503 STR90120
L1651 DCC-V
L1652 3.5mH
Q1703 2SC3298B-O
Q1704 2SD774-34
Q1705 2SD774-34
Q1706 2SA1175
Q1707 2SC4159-E
Q1708 2SB734-34
D1701 RGP15G
D1702 ERA81-004
D1703 ERA81-004
D1704 1SS119
D1705 1SS119
D1515 1SS119
D1709 RD5.6ESB2
D1710 RD5.6ESB2
IC1702 μPC4570HA
IC1704 NJM7812FA
L1705 2.2mH
L1703 150mH
Y. CROSS
Y. BOW
C. BOW


TO V BOARD
CNV01
1 GND
2 VIDEO
3 S-TV
CND23
S3R-H
TO VM BOARD
CND8S
S4B-H
1 Q.P.+
2 Q.P.-
3 GND
4 28V
TO F1 BOARD
CNF06
CND20
M5W-H
1 15V IN
2 GND
3 12V OUT
4 ST-BY
5 15V IN2
TO DY
CND84
M3W-H
1 CY +
2 NC
3 CY -
PIN PHASE
PIN AMP
H. SIZE
V. ANG
V. SIZE
Y. CROSS
C. BOW
Y. BOW
H. AMP
12V
15V
28V
135V
IC503 STR90120
IC1702 μPC4570HA
Q507 2SA1175
Q591 2SC2785
Q598 2SC2785
Q503 2SC2785
Q1652 2SA1220A-P
Q1653 2SC2958-K
Q1651 2SA1175
Q1552 2SC3298A-O
Q1551 2SC2785
Q1707 2SC4159-E
Q1705 2SD774-34
Q1708 2SB734-34
Q1709 2SC2785
Q1710 2SC2785
Q1711 2SC2785
D1652 S1B01-02
D1651 S1B01-02
D1552 RGP10G
D1707 RGP10G
D502 ERB12-01
D1710 RD5.6ESB2
D1709 RD5.6ESB2
D1708 RD4.7ESB2


TO HVR
TO FV
T802 FBT
NX-1613
28 V
12V
135V
28V
15V
200V
D502 ERB12-01
D506 MC931
Q807 2SC2275-Q
Q502 2SA1175
Q509 DTC114ES
Q510 DTC114ES
D801 RGP10G
D850 RGP15J
D802 RGP10G
D805 GP08D
D804 GP08D
D803 RGP01-17
D806 ERC06-15S
D807 ERC06-15S
D808 ERD29-08J
D809 1SS119
Q804 2SD1941-07
Q805 2SC2688-LK
Q806 2SA1221-L
Q1608 2SC2785
Q1609 2SC2785
Q1610 2SC2785
Q1613 2SA1175
D1550 1SS119
D1553 1SS119
T801 H.D.T
T803
T804 HLT
T805 PWT
H CENT
CND801 W5-H
CND21 VH3W-H
CND82 W3W-H
CND83 DY
GND
GND
135V
G2
200V
GND
H+
H+
H-
H-
V-
V+
TO DY
TO F1 BOARD CNF05
TO C BOARD CNC82


28V
15V
135V
200V
12V
IC502 TDA8170
D513 RD4.7ESB2
D512 GP08D
Q506 2SB734-34
Q509 DTC114ES
Q510 DTC114ES
V. CENT
V. ANG
V. SIZE
D1552 RGP10B
D1504 1SS119
D1503 1SS119
D1505 MC931
H. TILT
Q1701 2SC2785
IC1701 μPC393C
D1701 RGP15G
Q1703 2SC3298B-O
Q1704 2SD774-34
D1702 ERA81-004
D1703 ERA81-004
D1704 1SS119
D1705 1SS119
Q1706 2SA1175
Q1705 2SD774-34
IC1704 NJM7812FA
<12V REG>
IN
OUT
GND
Q1712 2SC2785
D809 1SS119
Q806 2SA1221-L
TO C BOARD CNC82
CNC83 DY
TO DY


28V
135V
15V
12V
V. ANG
V. SIZE
Y. CROSS
Y. BOW
C. BOW
IC503 STR90120
IC1702 μPC4570HA
IC1704 NJM7812FA
<12V REG>
IN
GND
OUT
D502 ERB12-01
D1651 SIB01-02
Q1651 2SA1175
Q1552 2SC3298A-O
Q1551 2SC2785
D1552 RGP10G
Q1703 2SC3298B-O
Q1704 2SD774-34
Q1705 2SD774-34
Q1706 2SA1175
Q1707 2SC4159-E
Q1708 2SB734-34
Q1709 2SC2785
Q1710 2SC2785
Q1711 2SC2785
Q1712 2SC2785
Q1716 DTC114ES
Q1717 2SA1175
D1708 RD4.7ESB2
D1709 RD5.6ESB2
D1710 RD5.6ESB2
D1515 1SS119
JUNGLE
50/60 SW
PIN AMP H/V


TO VM BOARD
28V
IC503 STR90120
D502 ERB12-01
15V
135V
V. ANG
CND20 M5W-H
15V IN
GND
12V OUT
ST-BY
15V IN2
TO F1 BOARD
CNF06
TO DY
CY +
NC
CY -
CND84 M3W-H
IC1702 μPC4570HA
Y. CROSS
C. BOW
Y. BOW
H. AMP
12V
TO CRT COATING EARTH
GND
GND
CND87 M2W-H
JUNGLE
50/60 SW
PIN AMP H/V OUT
D

[SYSTEM CONTROL, MEMORY,
AUDIO CONTROL
SURROUND PROCESSER.] **K** **K**

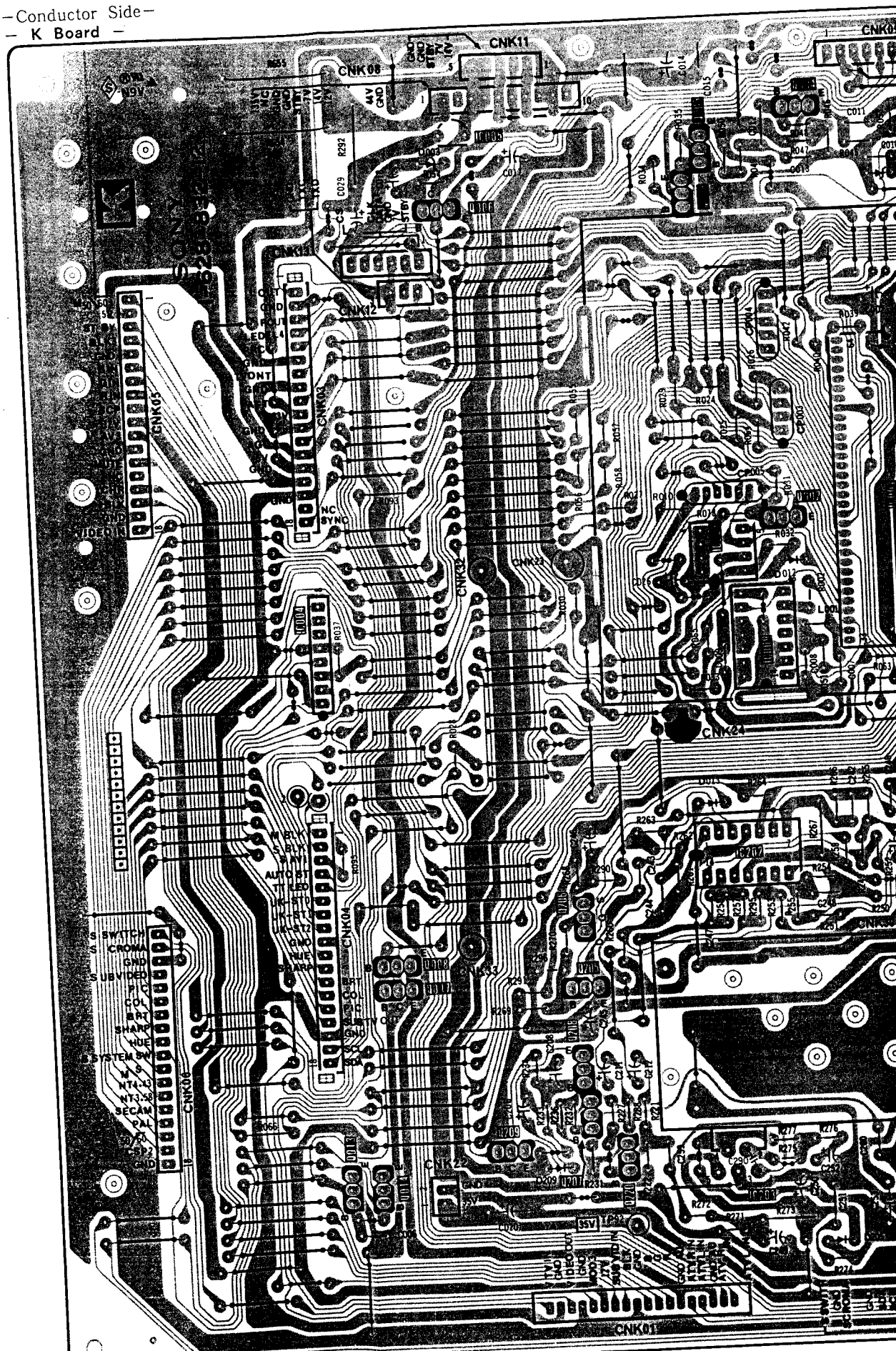
PRINTED WIRING BOARD

—Conductor Side—

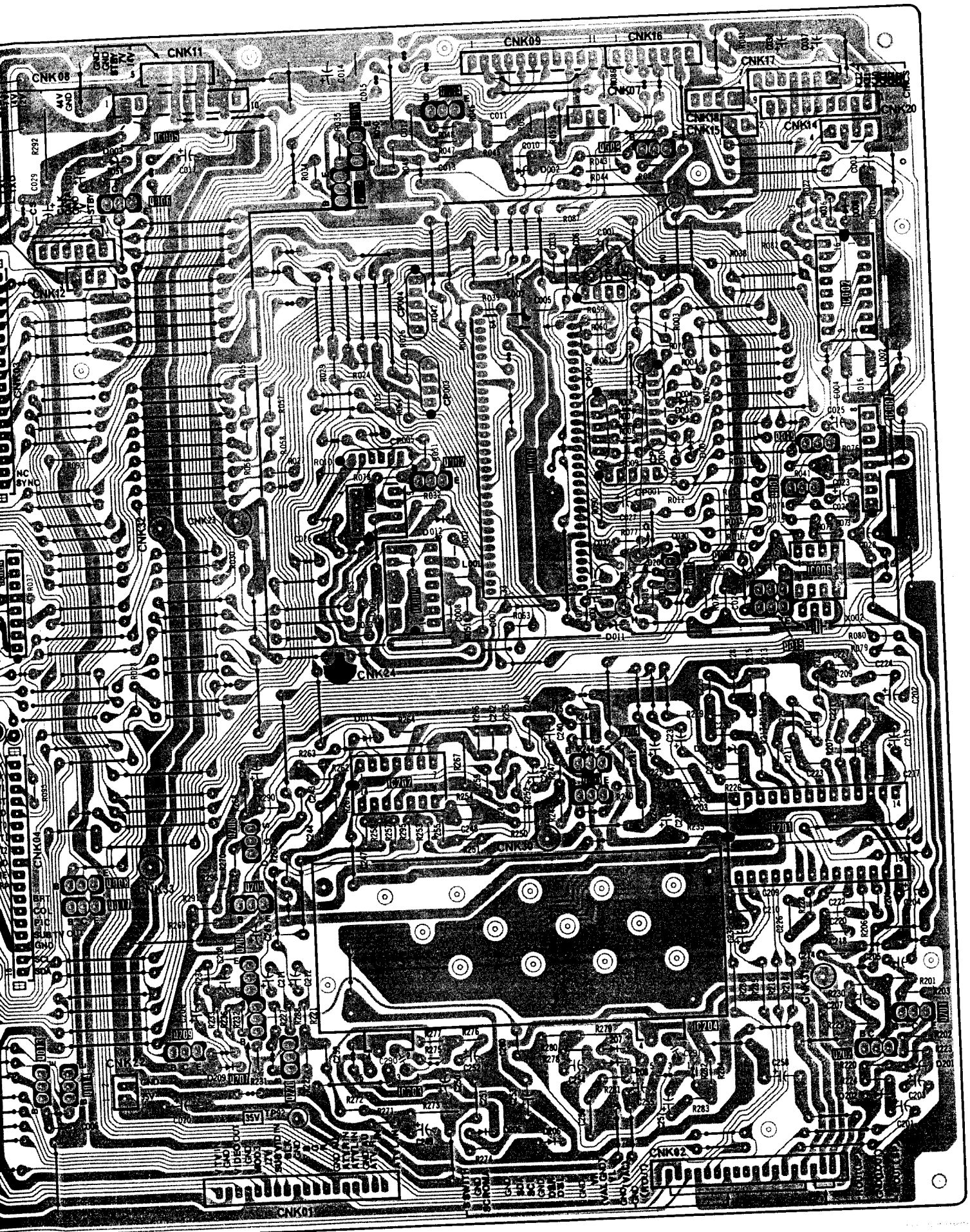
— K Board —

●K BOARD WAVEFORM

①	4.2 Vp-p (4MHz)
②	4.8 Vp-p (H)
③	1.3 Vp-p (H)
④	12.5Vp-p (H)



K


CNK08
CNK11
CNK09
CNK16
CNK17
CNK20
CNK07
CNK14
CNK15
CNK13
CNK12
CNK23
CNK32
CNK24
CNK04
CNK33
CNK30
CNK22
CNK01
CNK02
4V
GND
STBY
NC
SYNC
35V
VIDEO OUT
AUDIO OUT

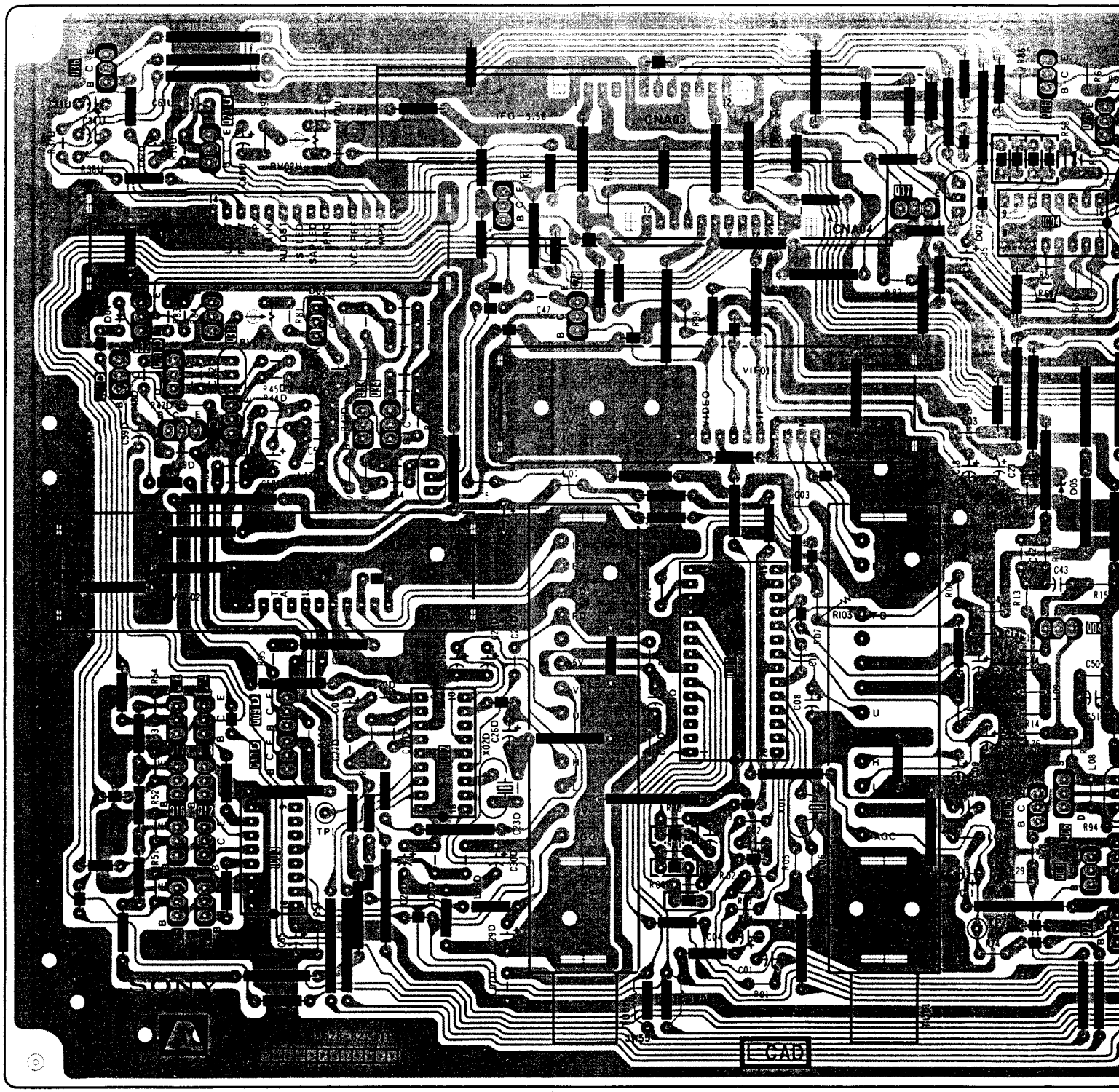
TUNER, VIF, SIF, SYSTEM SW, FLL CONT, AUDIO SW

A

PRINTED WIRING BOARDS

–Conductor Side–

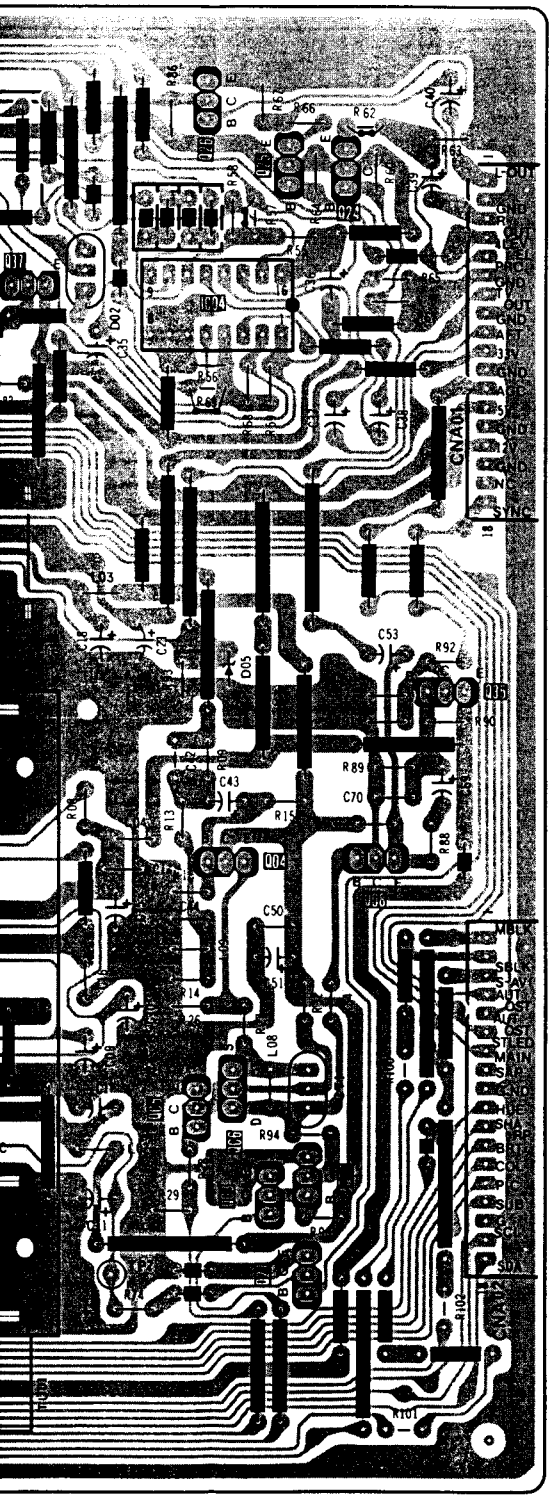
– A Board –



SIF.

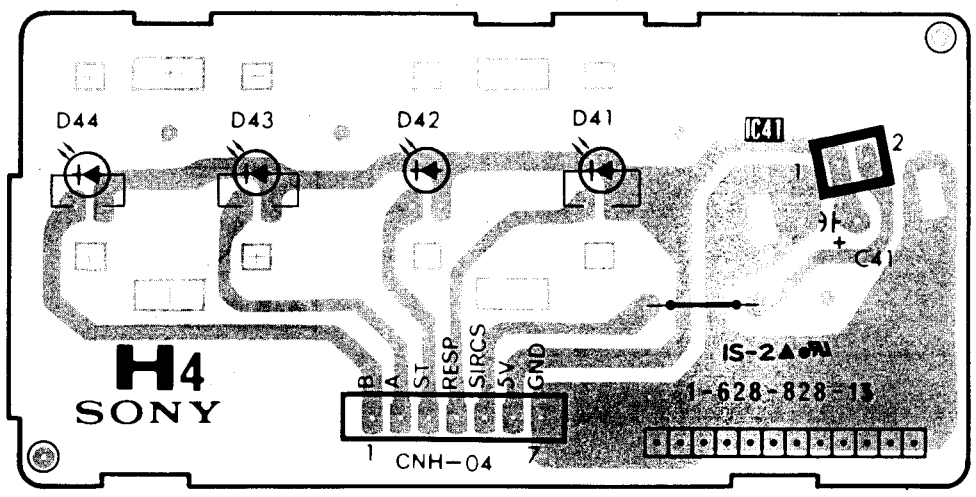
A

A **H4** [RMT-SENSOR INDICATOR]



—Conductor Side—

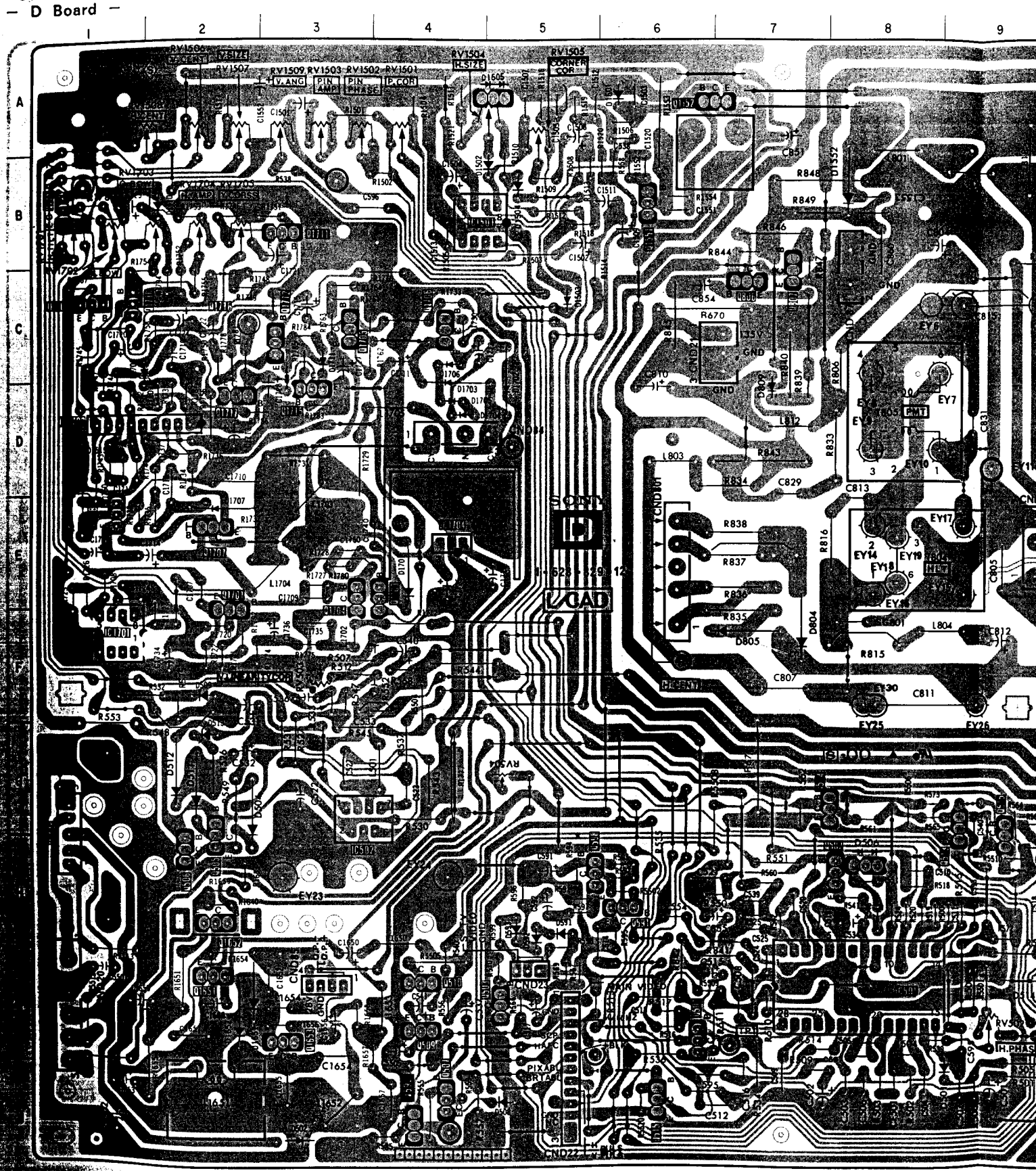
— **H4 Board** —



PRINTED WIRING BOARD
–Conductor Side–
– D Board –

JUNGLE
50/60 SW
PIN AMP H/V OUT

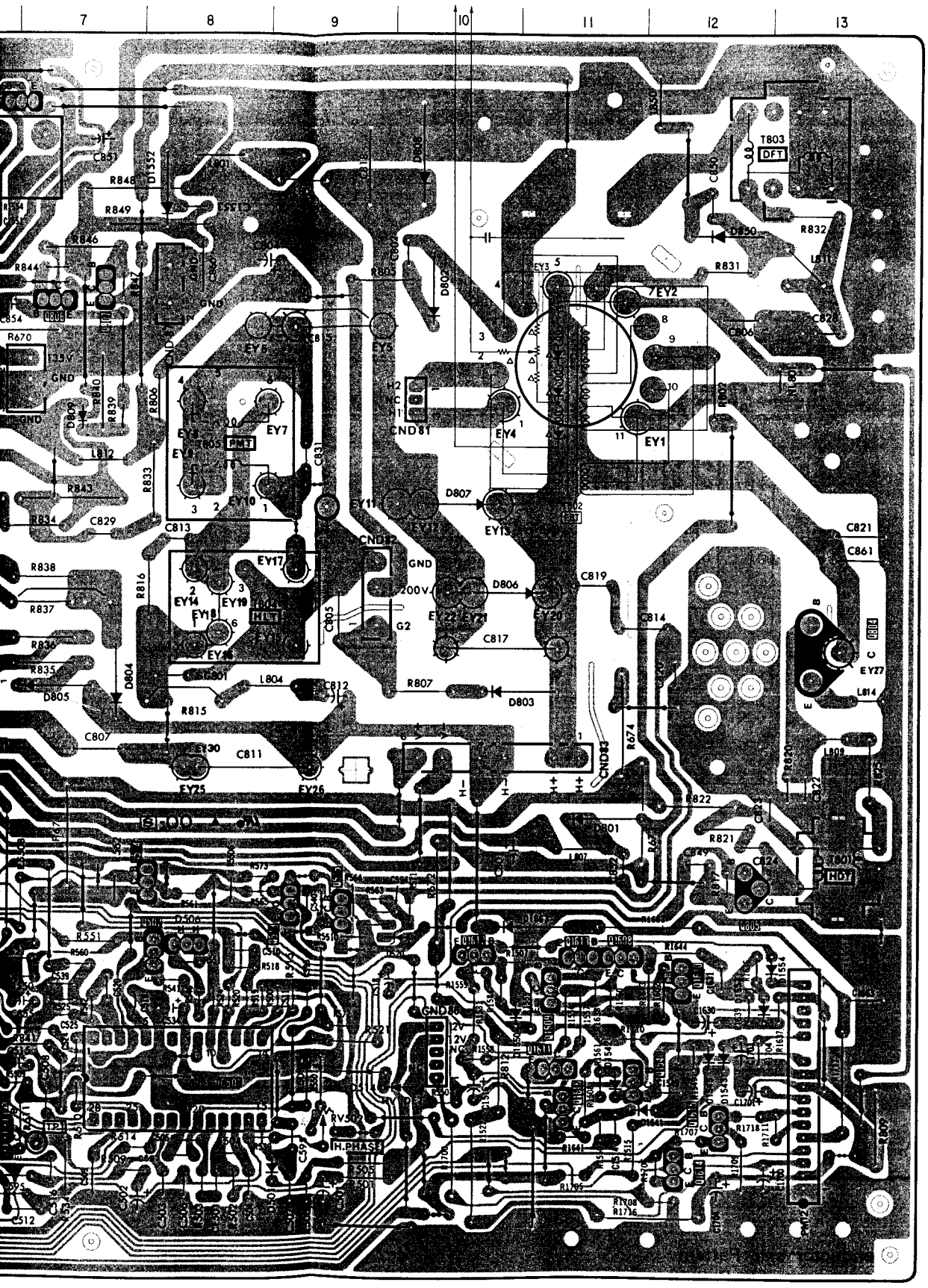
D



JUNGLE
50/60 SW
PIN AMP H/V OUT

D

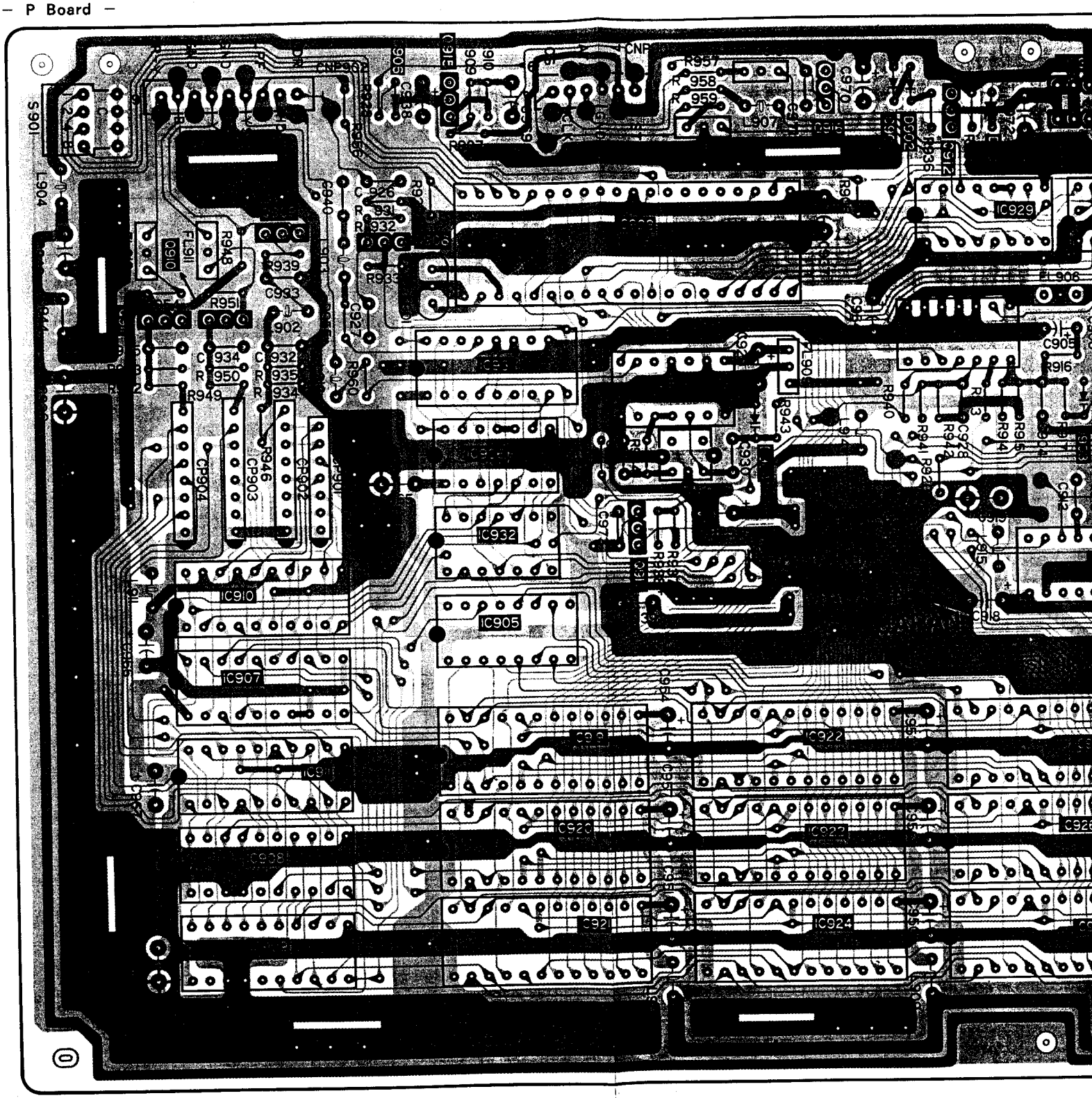
D



PRINTED WIRING BOARD [PICTURE IN PICTURE] **P** **P**

–Conductor Side–

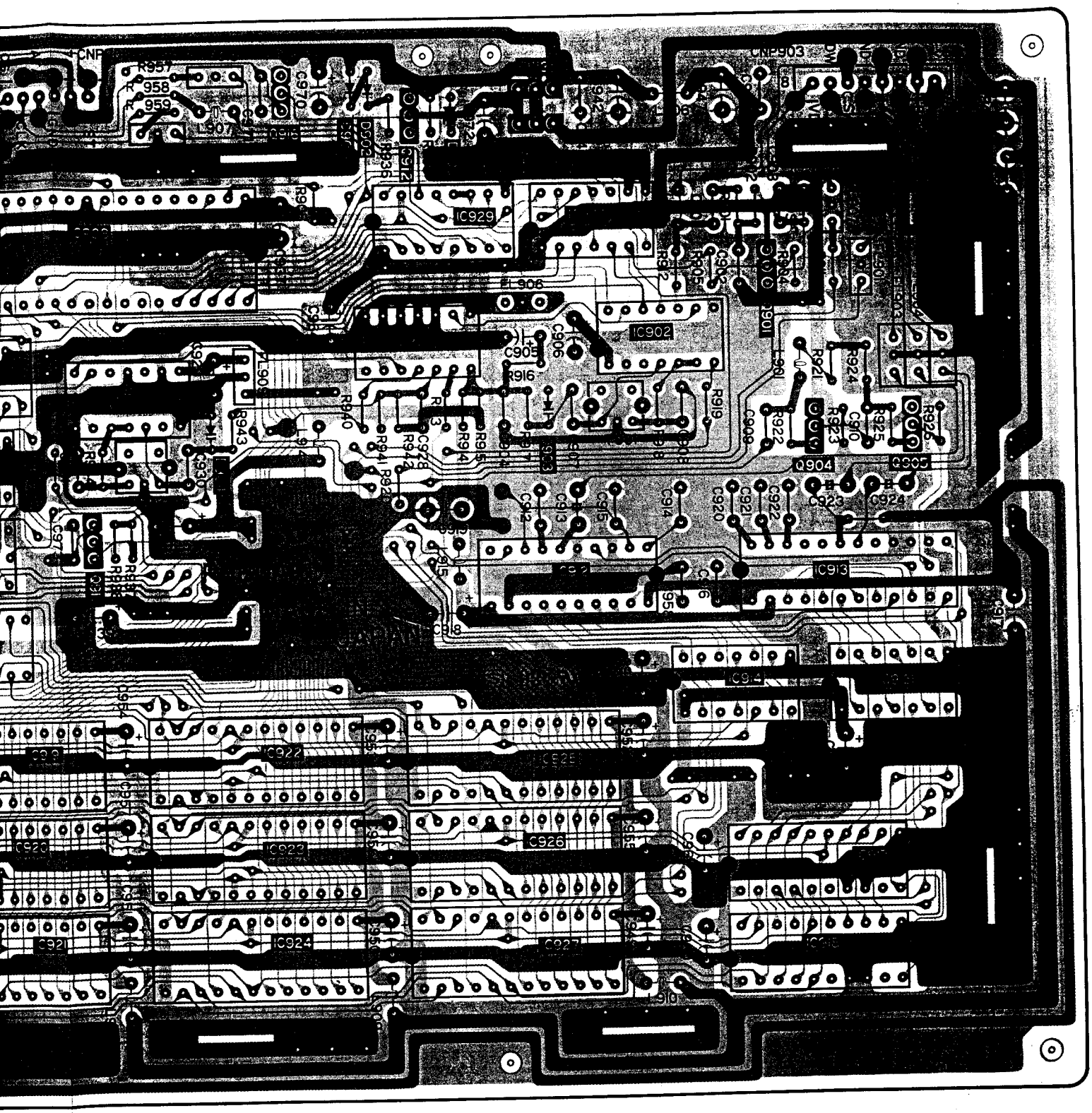
– P Board –

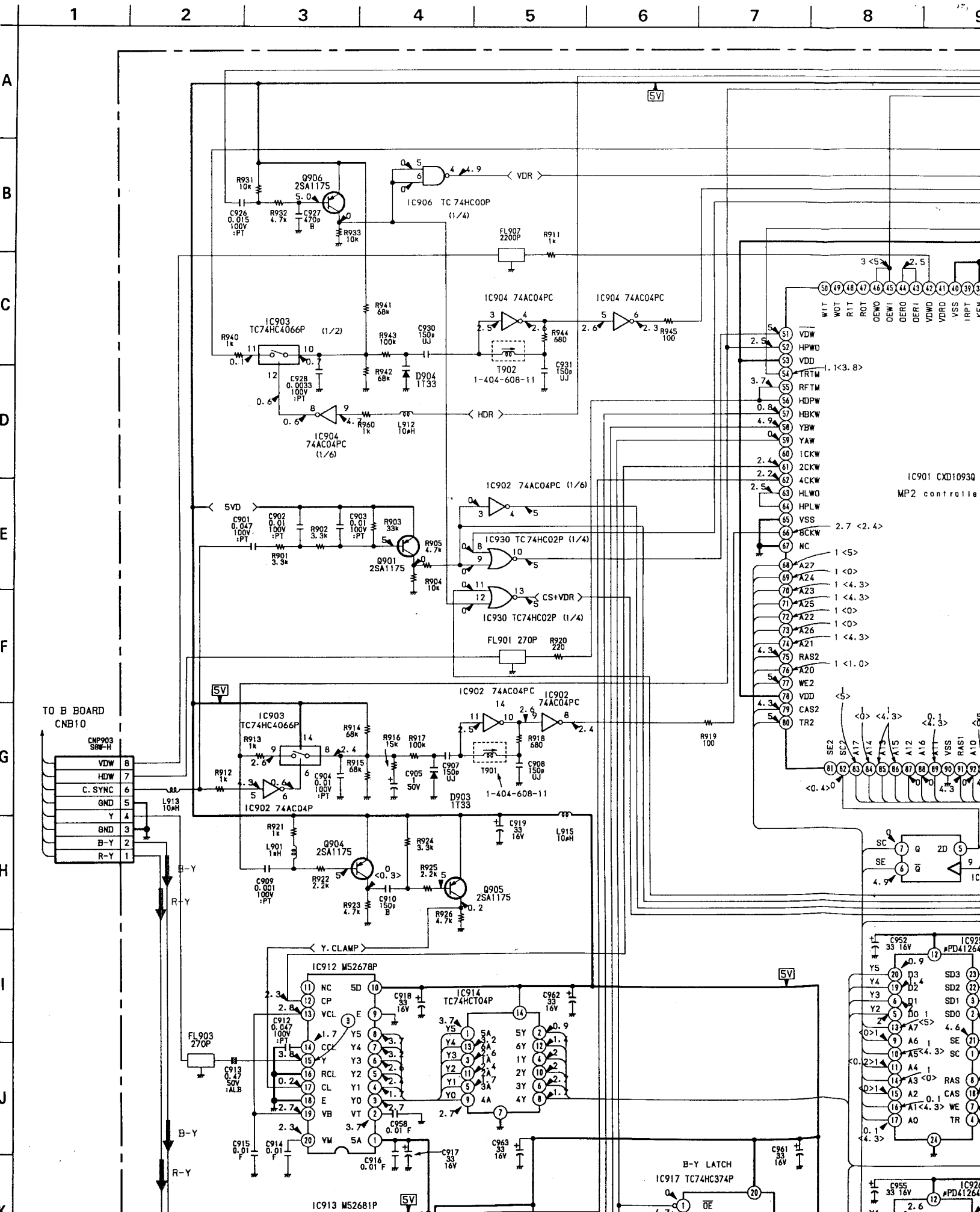


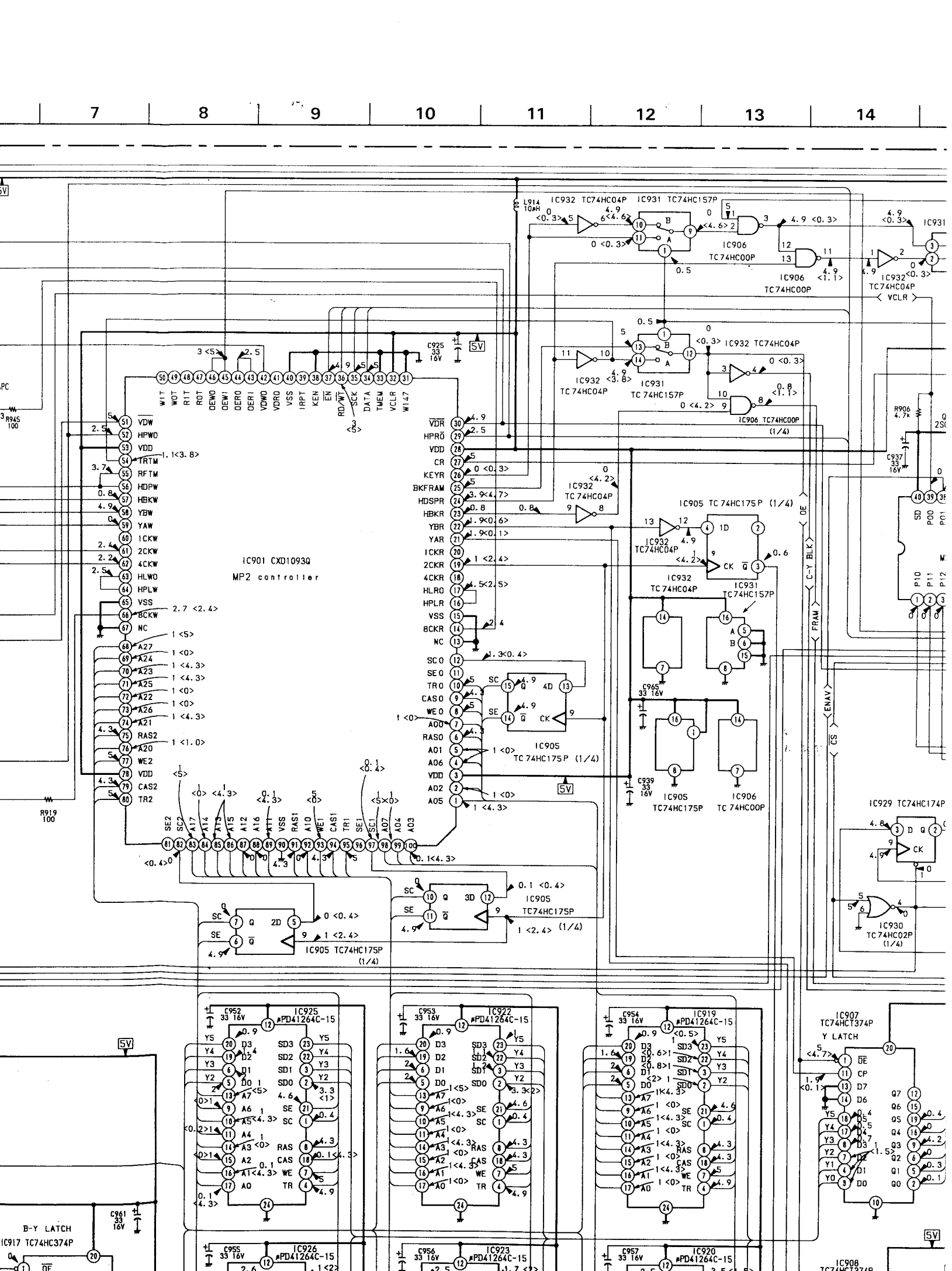
: Conductor side Pattern

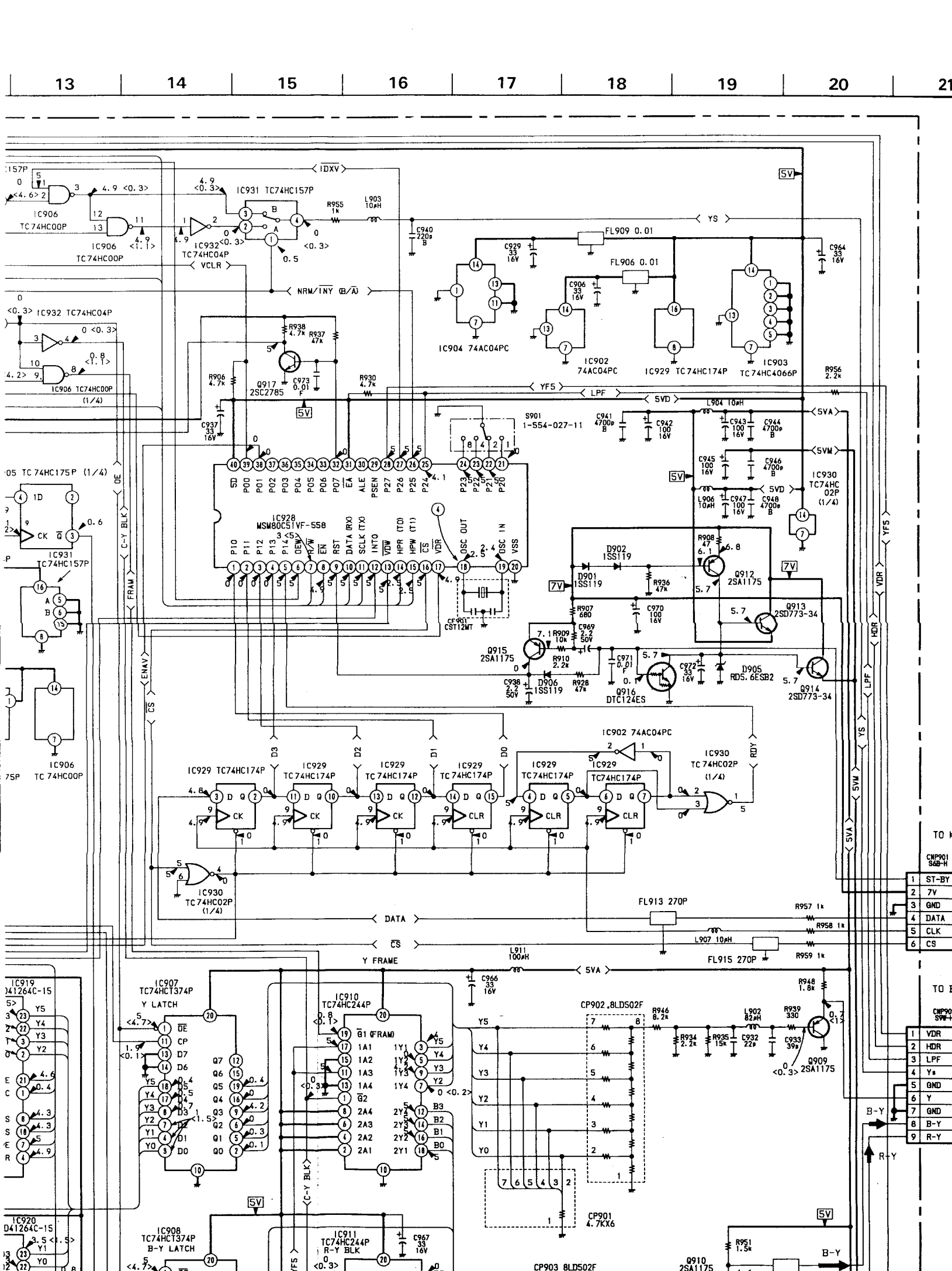
: Component side Pattern

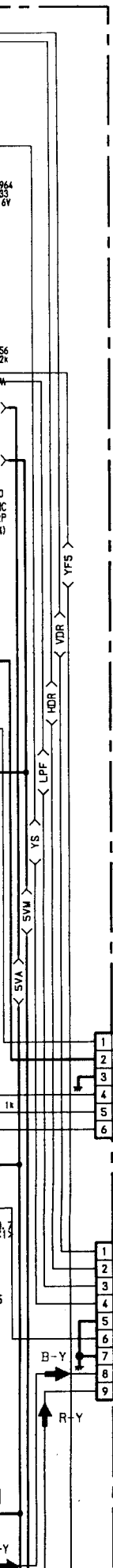
P

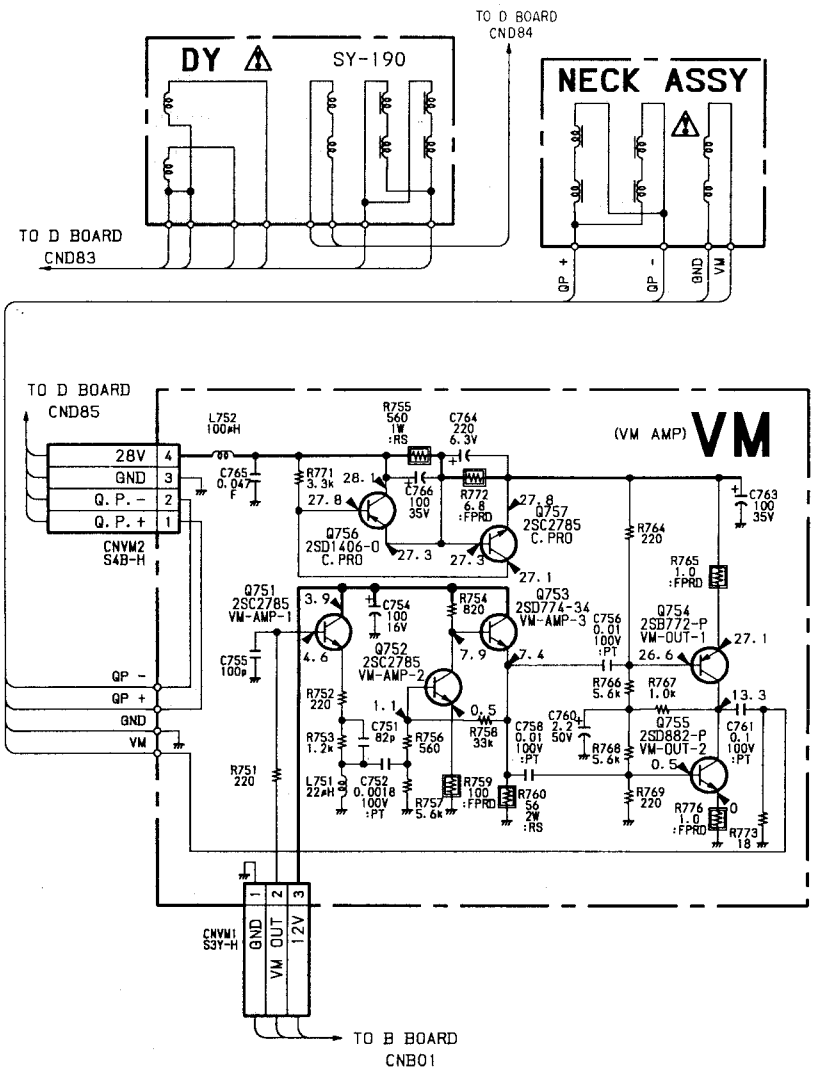

CNP903
R957
R958
R959
C970
L907
D902
C912
R935
IC929
L906
IC902
C905
C906
R916
L901
L902
R924
R921
R922
R923
C909
C910
R925
R926
Q904
C905
C923
C924
C920
C921
C922
C914
C915
C913
IC913
IC914
IC922
IC923
IC924
C926
C927


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
5V
VDR
HDR
5VD
Q906 2SA1175
IC906 TC74HC00P (1/4)
FL907 2200P
R911 1k
IC904 74AC04PC
IC903 TC74HC4066P (1/2)
T902 1-404-608-11
D904 1T33
IC904 74AC04PC (1/6)
IC902 74AC04PC (1/6)
IC930 TC74HC02P (1/4)
Q901 2SA1175
CS+VDR
FL901 270P
R920 220
IC902 74AC04PC
IC903 TC74HC4066P
T901 1-404-608-11
D903 1T33
IC902 74AC04P
TO B BOARD CNB10
CNP903 S8W-H
VDW
HDW
C. SYNC
GND
Y
GND
B-Y
R-Y
L913 10μH
L915 10μH
L901 1mH
Q904 2SA1175
Q905 2SA1175
Y. CLAMP
IC912 M52678P
IC914 TC74HCT04P
FL903 270P
IC913 M52681P
B-Y LATCH
IC917 TC74HC374P
IC901 CXD1093Q
MP2 controlle
VDW
HPWO
VDD
TRTW
RFTW
HDPW
HBKW
YBW
YAW
1CKW
2CKW
4CKW
HLWO
HPLW
VSS
BCKW
NC
A27
A24
A23
A25
A22
A26
A21
RAS2
A20
WE2
VDD
CAS2
TR2


7
8
9
10
11
12
13
14
IC901 CXD1093Q
MP2 controller
IC905 TC74HC175P (1/4)
IC906 TC74HC00P
IC932 TC74HC04P
IC931 TC74HC157P
IC929 TC74HC174P
IC930 TC74HC02P (1/4)
IC907 TC74HCT374P
Y LATCH
B-Y LATCH
IC917 TC74HC374P
IC925 μPD41264C-15
IC922 μPD41264C-15
IC919 μPD41264C-15
IC926 μPD41264C-15
IC923 μPD41264C-15
IC920 μPD41264C-15
IC908 TC74HCT374P
VCLR
C-Y BLK
FRAM
OE
ENAV
CS
5V


13
14
15
16
17
18
19
20
21
IDXV
VCLR
NRM/INV (B/A)
YFS
LPF
VDR
HDR
C-Y BLK
FRAM
OE
CS
ENAV
DATA
Y FRAME
IC906 TC74HC00P
IC931 TC74HC157P
IC932 TC74HC04P
IC904 74AC04PC
IC902 74AC04PC
IC903 TC74HC4066P
IC929 TC74HC174P
IC928 MSM80C51VF-558
IC930 TC74HC02P
IC907 TC74HCT374P
Y LATCH
IC910 TC74HC244P
IC908 TC74HCT374P
B-Y LATCH
IC911 TC74HC244P
R-Y BLK
IC919 D41264C-15
IC920 D41264C-15
Q917 2SC2785
Q912 2SA1175
Q913 2SD773-34
Q915 2SA1175
Q916 DTC124ES
Q914 2SD773-34
Q909 2SA1175
Q910 2SA1175
D901 1SS119
D902 1SS119
D906 1SS119
D905 RD5.6ESB2
S901 1-554-027-11
CF901 CST12MT
CP902 8LD502F
CP903 8LD502F
CP901 4.7KX6
FL909 0.01
FL906 0.01
FL913 270P
FL915 270P
5V
7V
5VA
5VD
5VM
TO K
TO E
CNP901 S&B-H
1 ST-BY
2 7V
3 GND
4 DATA
5 CLK
6 CS
CNP902 S&B-H
1 VDR
2 HDR
3 LPF
4 Ys
5 GND
6 Y
7 GND
8 B-Y
9 R-Y



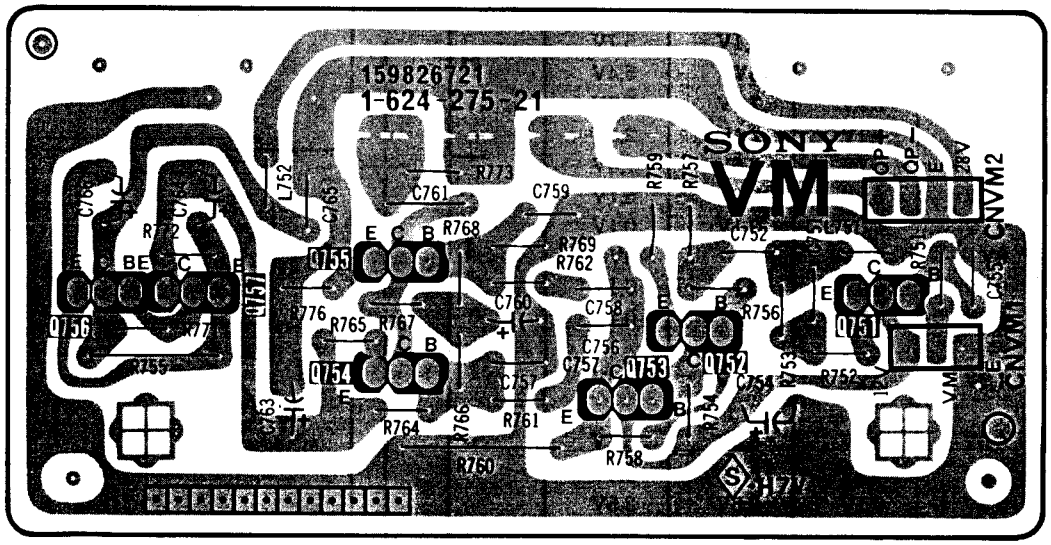


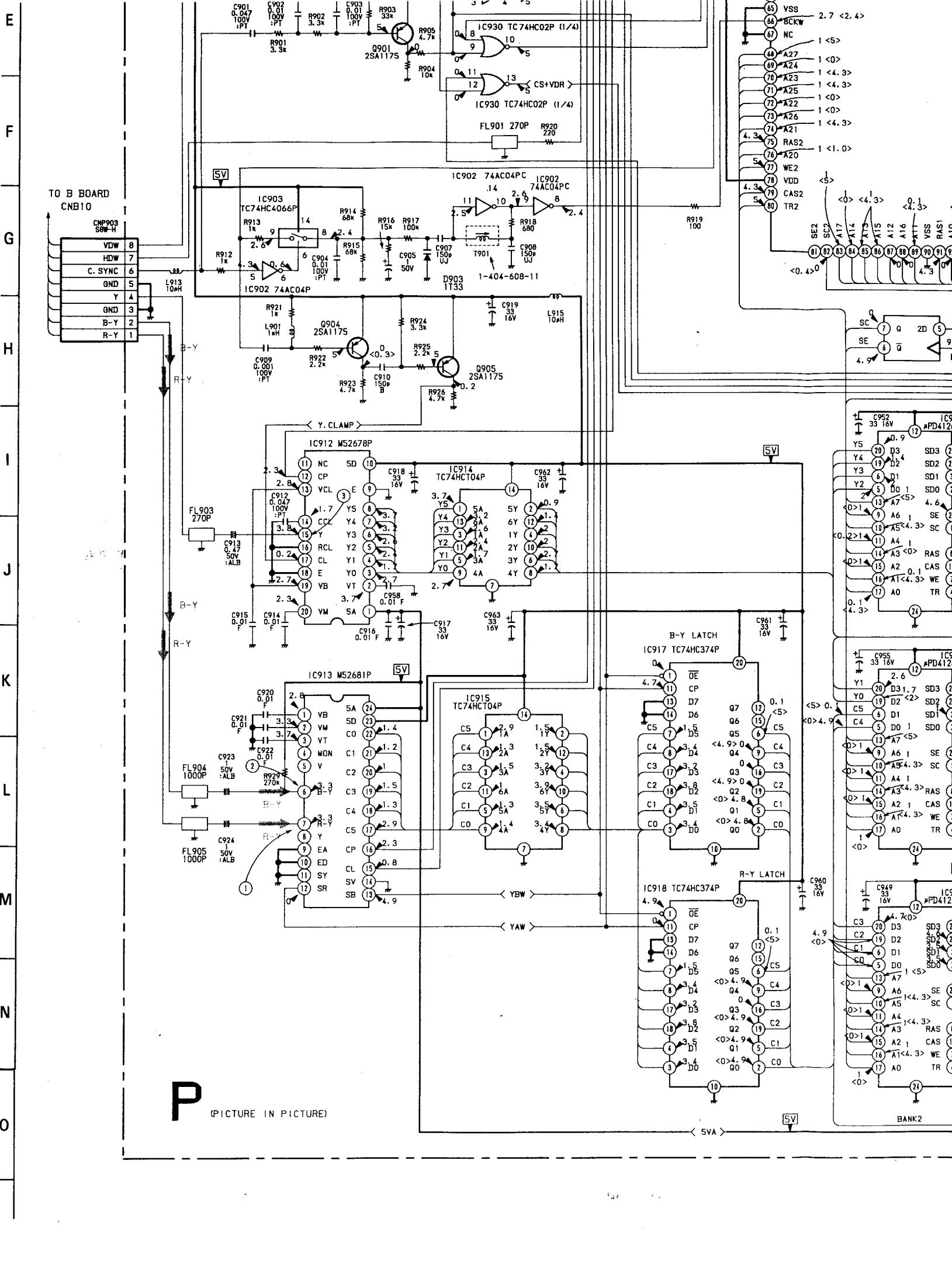
VM [VM AMP]

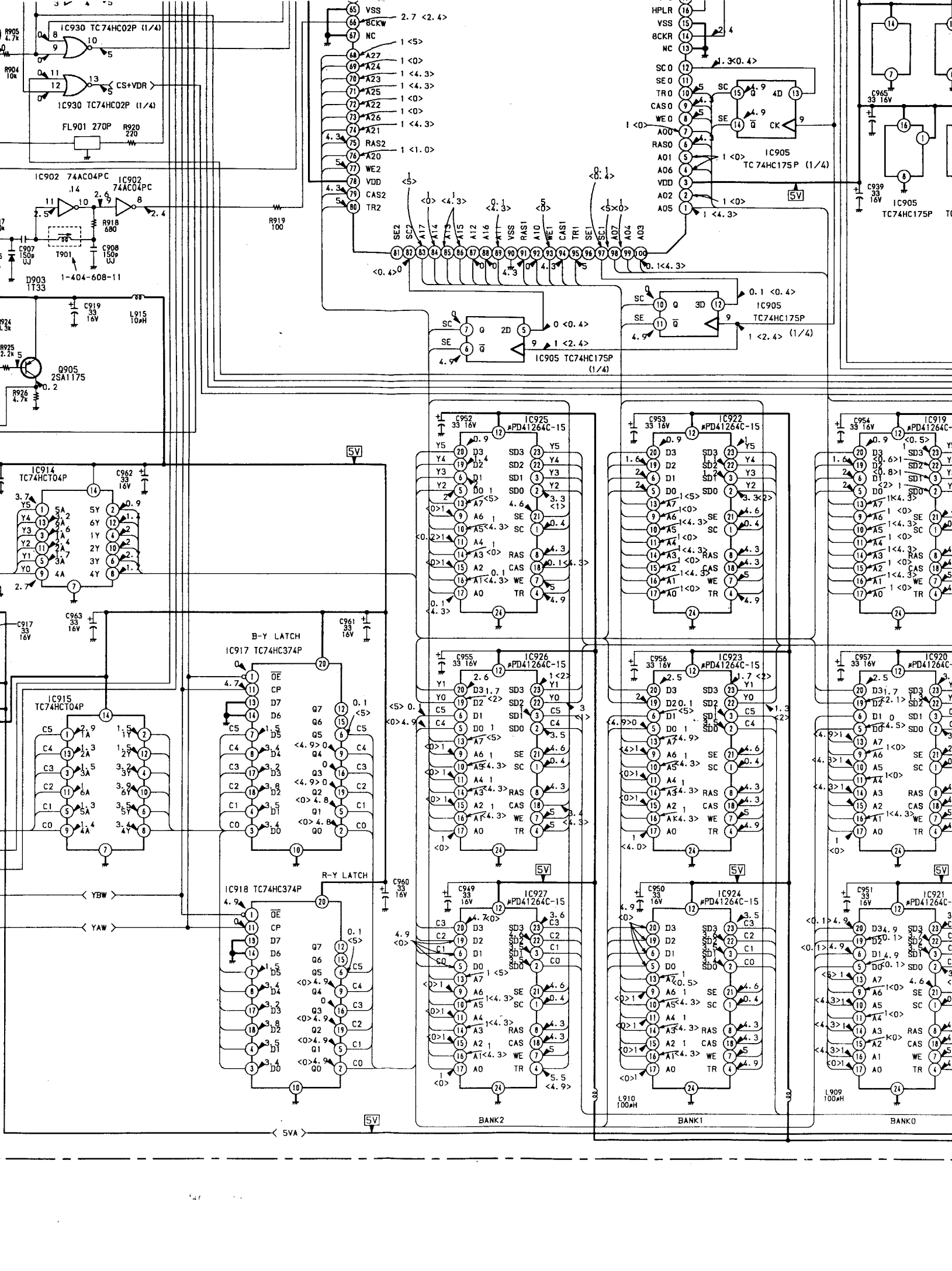
PRINTED WIRING BOARDS

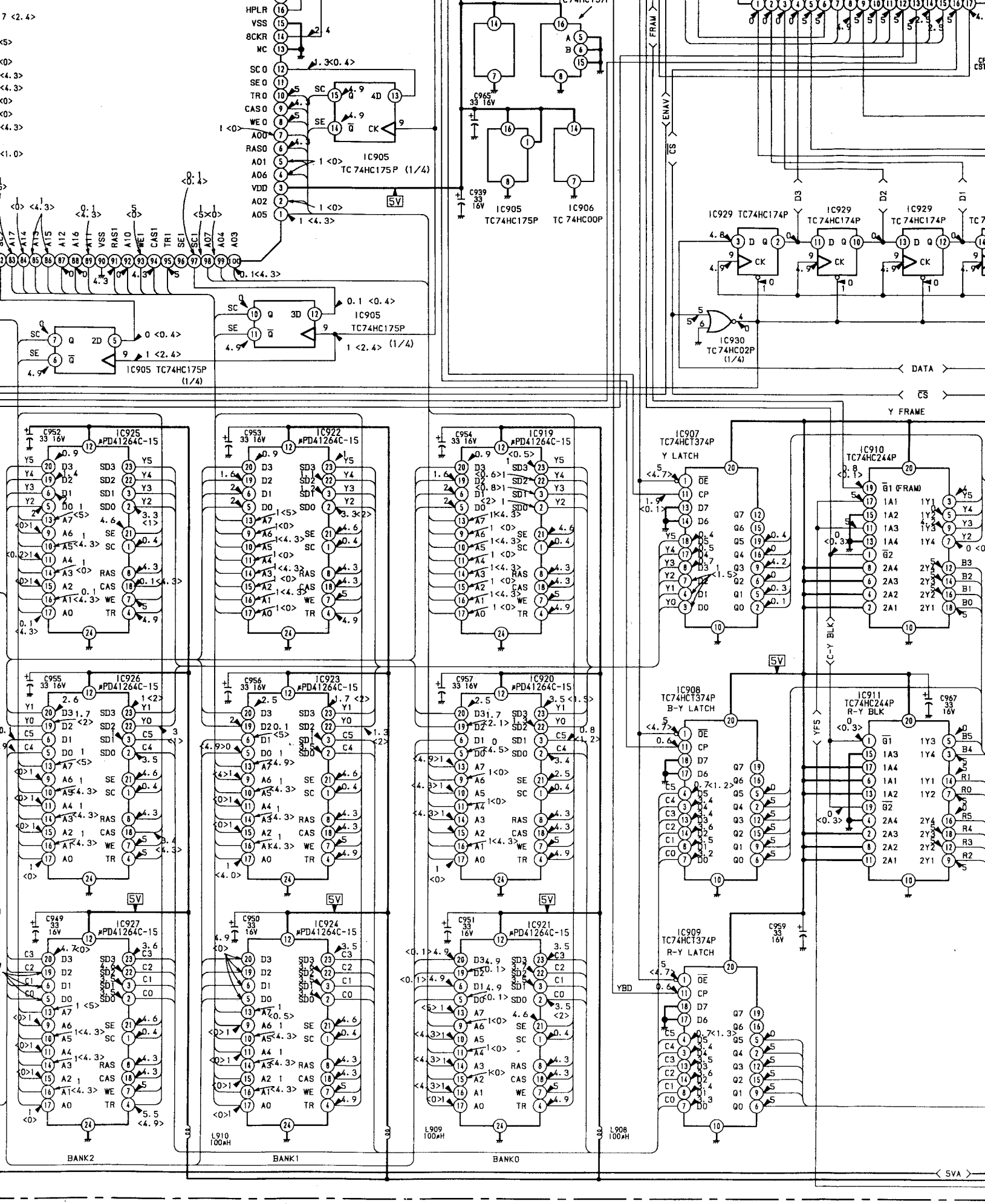
–Conductor Side–

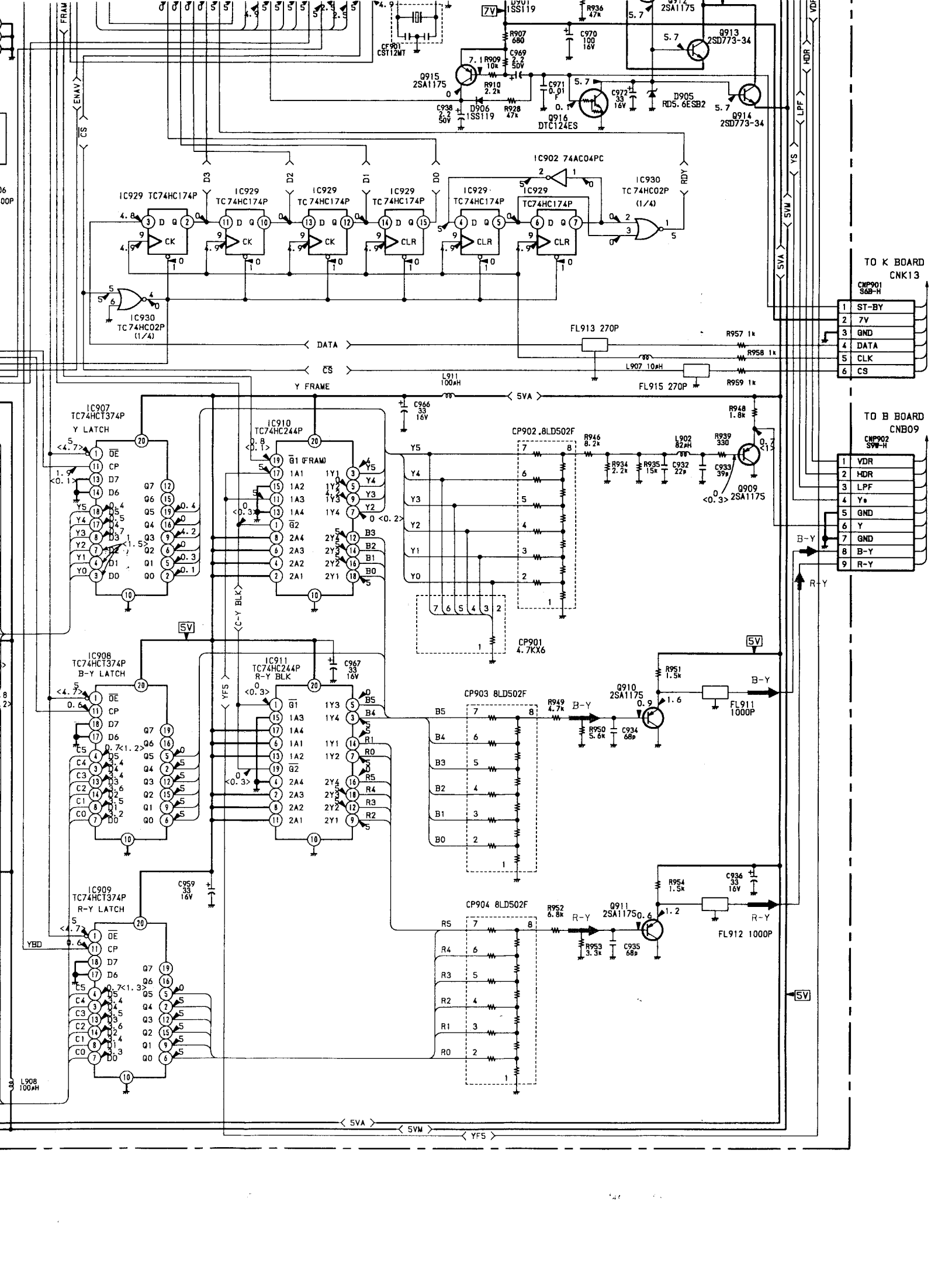
– **VM Board** –

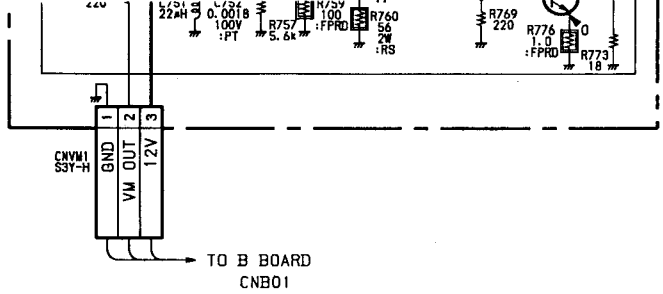



TO B BOARD
CNB10
CNP903
S8W-H
VDW 8
HDW 7
C. SYNC 6
GND 5
Y 4
GND 3
B-Y 2
R-Y 1
L913 10μH
5V
IC903
TC74HC4066P
IC902 74AC04P
IC902 74AC04PC
IC930 TC74HC02P (1/4)
IC930 TC74HC02P (1/4)
CS+VDR
FL901 270P
R920 220
Q901 2SA1175
R901 3.3k
R902 3.3k
R903 33k
R904 10k
R905 4.7k
C901 0.047 100V :PT
C902 0.01 100V :PT
C903 0.01 100V :PT
R912 1k
R913 1k
R914 68k
R915 68k
R916 15k
R917 100k
R918 680
R919 100
C904 0.01 100V :PT
C905 1 50V
C907 150p UJ
C908 150p UJ
T901 1-404-608-11
D903 1T33
Q904 2SA1175
Q905 2SA1175
R921 1k
R922 2.2k
R923 4.7k
R924 3.3k
R925 2.2k
R926 4.7k
L901 1mH
C909 0.001 100V :PT
C910 150p B
C919 33 16V
L915 10μH
Y. CLAMP
IC912 M52678P
IC914 TC74HCT04P
FL903 270P
C912 0.047 100V :PT
C913 0.47 50V :ALB
C914 0.01 F
C915 0.01 F
C916 0.01 F
C917 33 16V
C918 33 16V
C958 0.01 F
C962 33 16V
C963 33 16V
IC913 M52681P
IC915 TC74HCT04P
B-Y LATCH
IC917 TC74HC374P
R-Y LATCH
IC918 TC74HC374P
C960 33 16V
C961 33 16V
FL904 1000P
FL905 1000P
C920 0.01 F
C921 0.01 F
C922 0.01 F
C923 50V :ALB
C924 50V :ALB
R929 270k
YBW
YAW
5VA
BANK2
P (PICTURE IN PICTURE)


IC930 TC74HC02P (1/4)
IC930 TC74HC02P (1/4)
CS+VDR
FL901 270P
R920 220
IC902 74AC04PC
IC902 74AC04PC
R918 680
C907 150p UJ
C908 150p UJ
T901
1-404-608-11
D903 1T33
C919 33 16V
L915 10μH
Q905 2SA1175
R926 4.7k
R919 100
IC905 TC74HC175P (1/4)
IC905 TC74HC175P (1/4)
IC905 TC74HC175P (1/4)
IC905 TC74HC175P
IC914 TC74HCT04P
IC915 TC74HCT04P
C962 33 16V
C963 33 16V
C961 33 16V
C917 33 16V
B-Y LATCH
IC917 TC74HC374P
R-Y LATCH
IC918 TC74HC374P
YBW
YAW
5VA
5V
C952 33 16V
IC925 μPD41264C-15
C953 33 16V
IC922 μPD41264C-15
C954 33 16V
IC919 μPD41264C-15
C955 33 16V
IC926 μPD41264C-15
C956 33 16V
IC923 μPD41264C-15
C957 33 16V
IC920 μPD41264C-15
C949 33 16V
IC927 μPD41264C-15
C950 33 16V
IC924 μPD41264C-15
C951 33 16V
IC921 μPD41264C-15
L910 100μH
L909 100μH
BANK2
BANK1
BANK0


IC905 TC74HC175P (1/4)
IC905 TC74HC175P
IC906 TC74HC00P
IC929 TC74HC174P
IC930 TC74HC02P (1/4)
DATA
CS
Y FRAME
IC907 TC74HCT374P Y LATCH
IC910 TC74HC244P
IC908 TC74HCT374P B-Y LATCH
IC911 TC74HC244P R-Y BLK
IC909 TC74HCT374P R-Y LATCH
C-Y BLK
YBD
5VA
IC925 μPD41264C-15
IC922 μPD41264C-15
IC919 μPD41264C-15
IC926 μPD41264C-15
IC923 μPD41264C-15
IC920 μPD41264C-15
IC927 μPD41264C-15
IC924 μPD41264C-15
IC921 μPD41264C-15
BANK2
BANK1
BANK0


IC907 TC74HCT374P Y LATCH
IC910 TC74HC244P
IC908 TC74HCT374P B-Y LATCH
IC911 TC74HC244P R-Y BLK
IC909 TC74HCT374P R-Y LATCH
IC929 TC74HC174P
IC930 TC74HC02P (1/4)
IC902 74AC04PC
CP901 4.7KX6
CP902 8LD502F
CP903 8LD502F
CP904 8LD502F
Q909 2SA1175
Q910 2SA1175
Q911 2SA1175
Q913 2SD773-34
Q914 2SD773-34
Q915 2SA1175
Q916 DTC124ES
D905 RD5.6ESB2
D906 1SS119
FL913 270P
FL915 270P
FL911 1000P
FL912 1000P
TO K BOARD CNK13
CNP901 S6B-H
1 ST-BY
2 7V
3 GND
4 DATA
5 CLK
6 CS
TO B BOARD CNB09
CNP902 S9W-H
1 VDR
2 HDR
3 LPF
4 Ys
5 GND
6 Y
7 GND
8 B-Y
9 R-Y
DATA
CS
Y FRAME
C-Y BLK
YBD
YF5
5VA
5VM
5V
7V

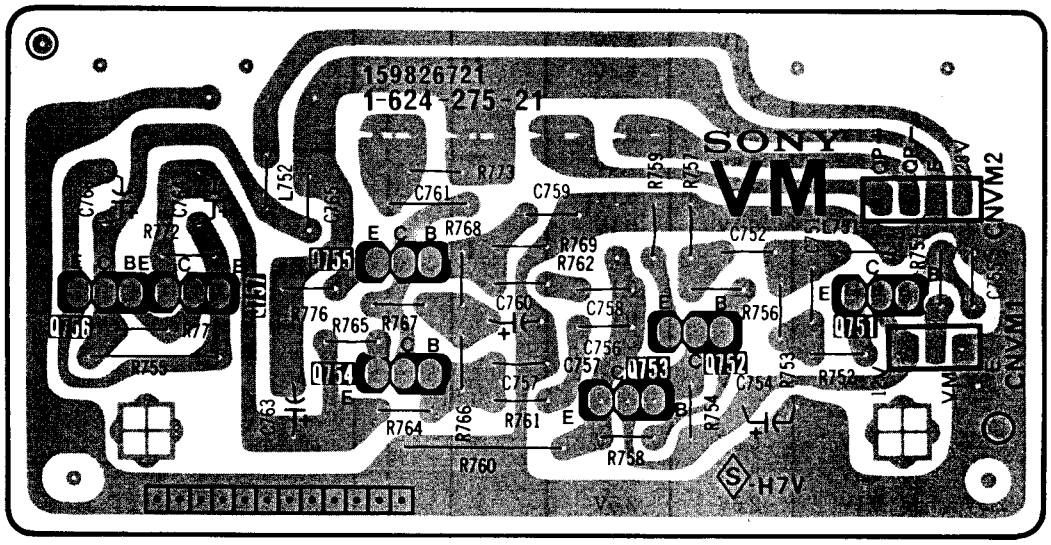


VM [VM AMP]

PRINTED WIRING BOARDS

–Conductor Side–

– VM Board –



TO K BOARD
CNK13

CNP901
S6B-H

1	ST-BY
2	7V
3	GND
4	DATA
5	CLK
6	CS

TO B BOARD
CNB09

CNP902
S9B-H

1	VDR
2	HDR
3	LPF
4	Ye
5	GND
6	Y
7	GND
8	B-Y
9	R-Y

●P BOARD WAVEFORM

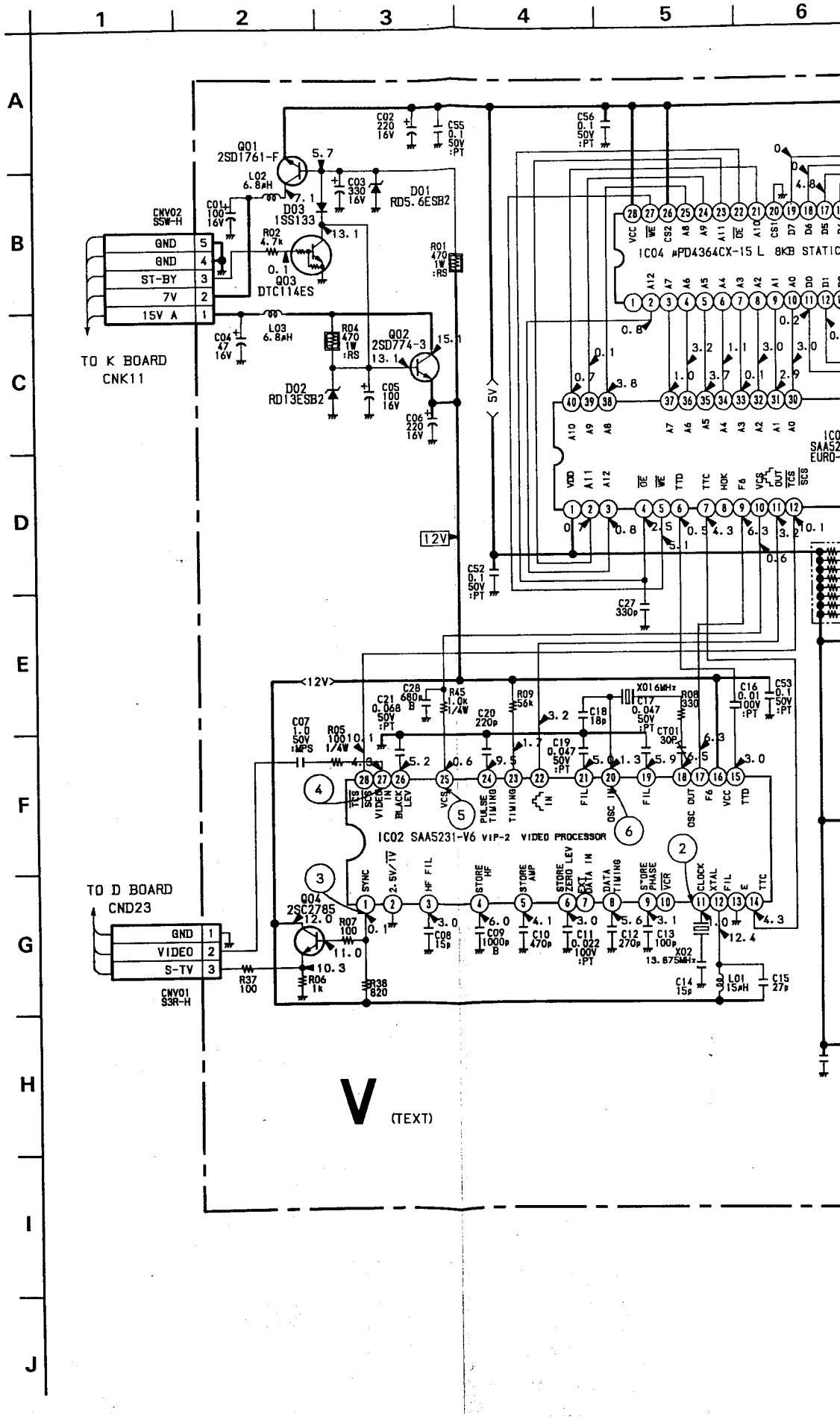
①	②	③	④
0.8 Vp-p (H)	0.7 Vp-p (H)	1.0 Vp-p (H)	4.8 Vp-p (10MHz)

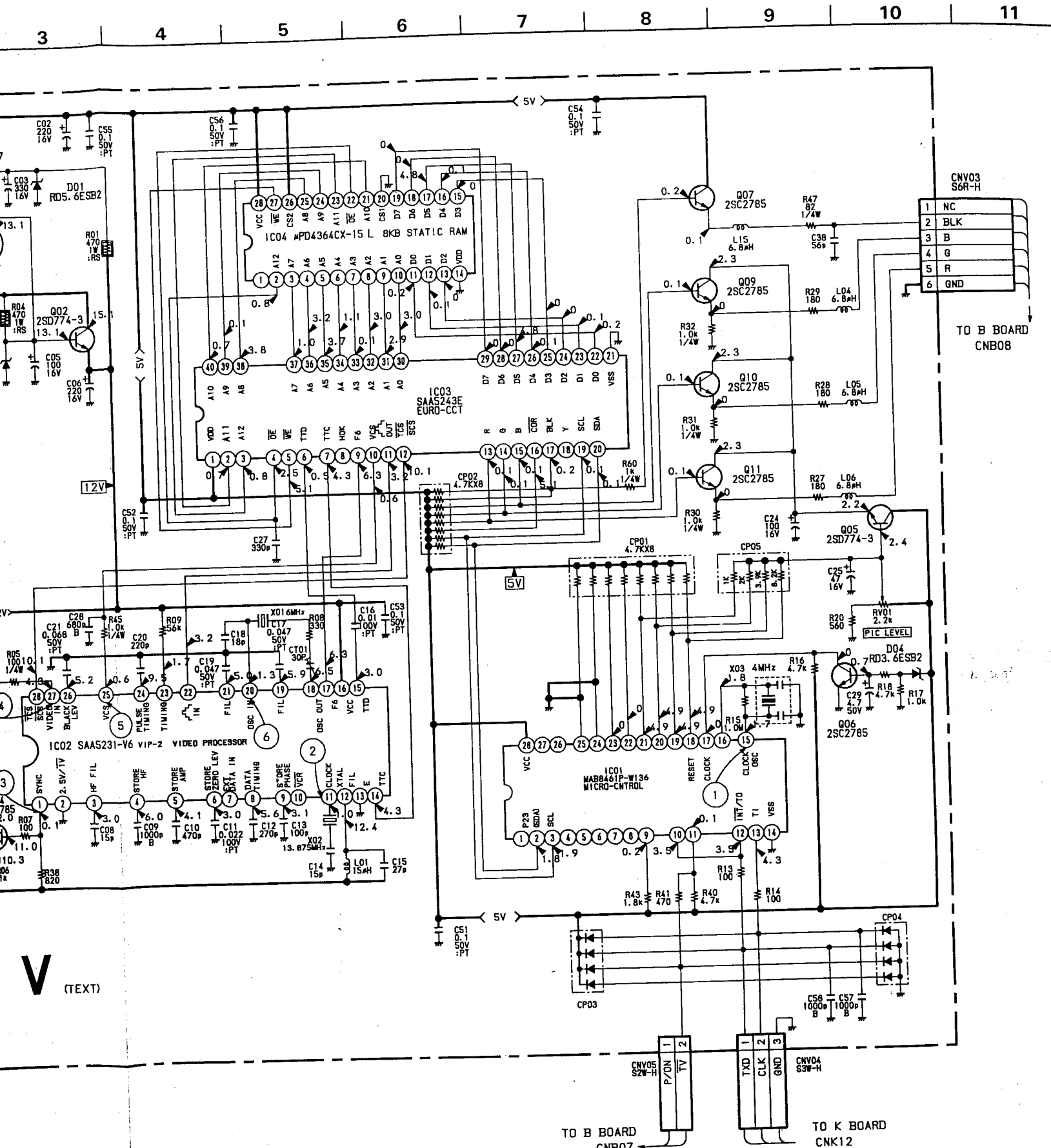
The voltage value on the P board indicating with< >is the one at receiving Picture in picture (P/P)

●V BOARD WAVEFORM

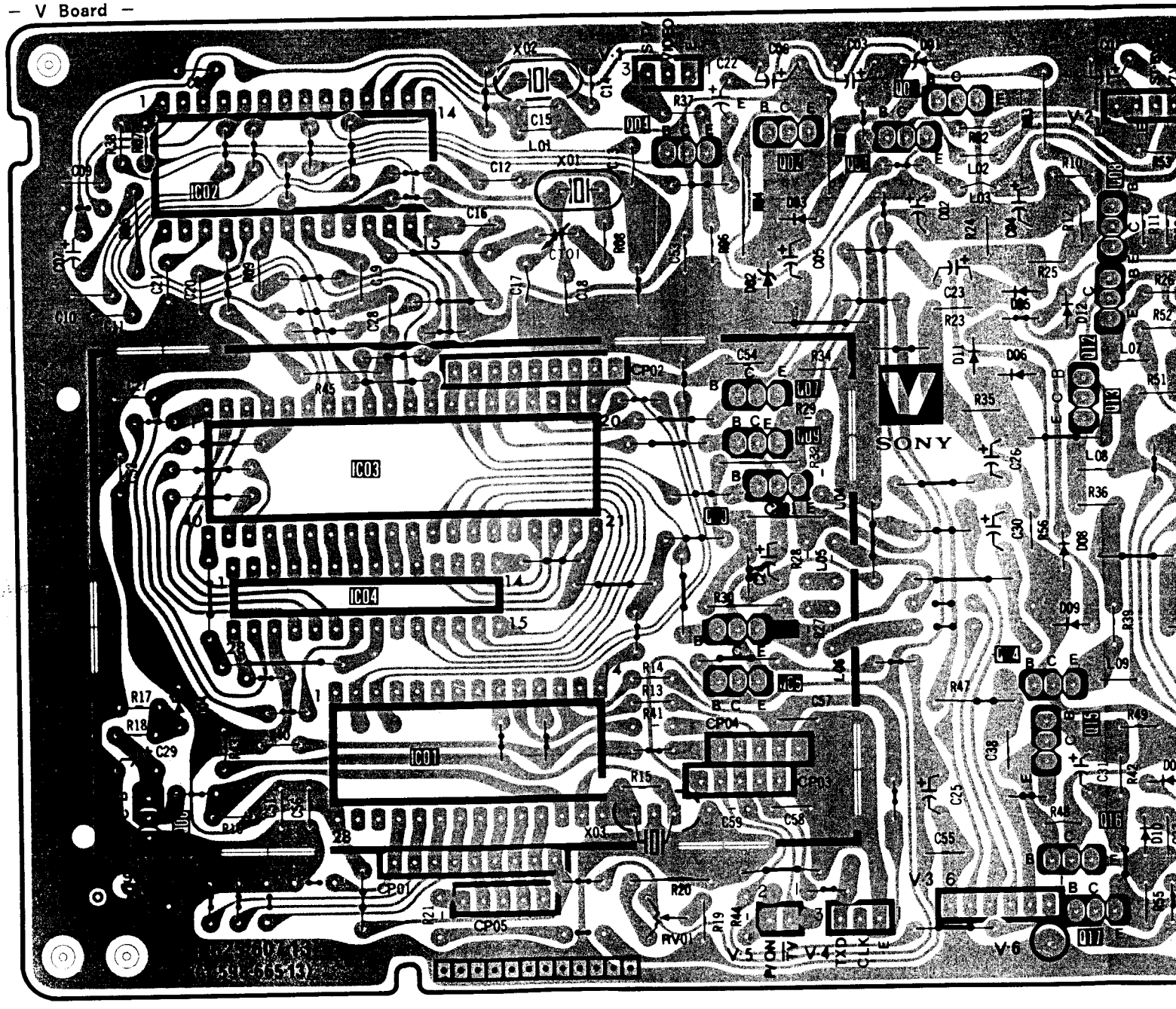
① 3.5Vp-p (4MHz)	④ 1.0 Vp-p (H)
② 0.56Vp-p (8.75MHz)	⑤ 2.9 Vp-p (H)
③ 1.0 Vp-p (H)	⑥ 0.4Vp-p (6MHz)

SCHEATIC DIAGRAM

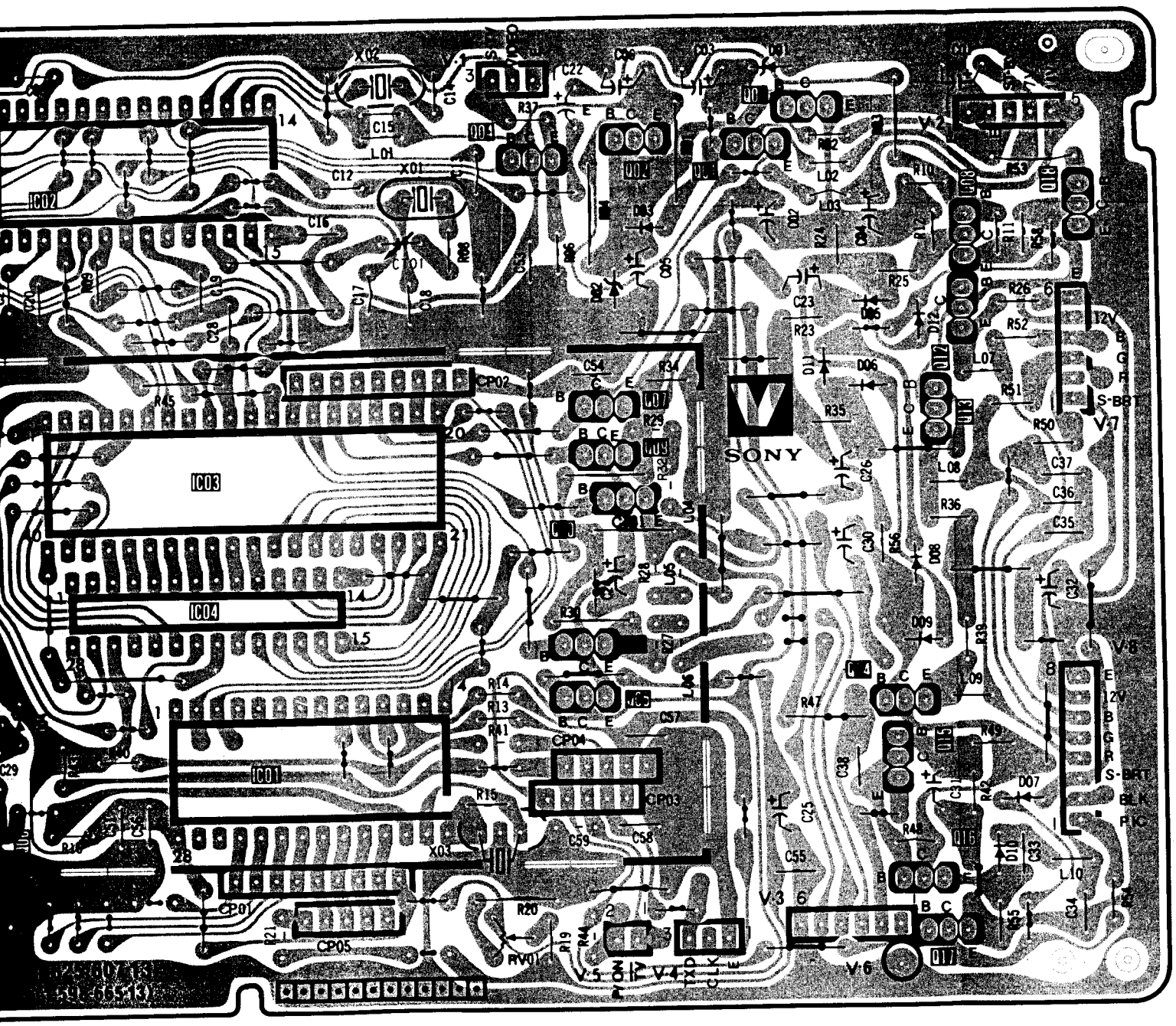



3
4
5
6
7
8
9
10
11
5V
12V
IC04 μPD4364CX-15 L 8KB STATIC RAM
IC03
SAA5243E
EURO-CCT
IC02 SAA5231-V6 VIP-2 VIDEO PROCESSOR
IC01
MAB8461P-W136
MICRO-CNTROL
Q07 2SC2785
Q09 2SC2785
Q10 2SC2785
Q11 2SC2785
Q05 2SD774-3
Q02 2SD774-3
Q06 2SC2785
D01 RD5.6ESB2
D04 RD3.6ESB2
CNV03 S6R-H
1 NC
2 BLK
3 B
4 G
5 R
6 GND
TO B BOARD
CNB08
CNV05 S2W-H
P/ON
TV
CNV04 S3W-H
TXD
CLK
GND
TO B BOARD
CNB07
TO K BOARD
CNK12
X016MHz
X03 4MHz
X02 13.875MHz
PIC LEVEL
RV01 2.2k
CP01 4.7KX8
CP02 4.7KX8
CP03
CP04
CP05
V (TEXT)

PRINTED WIRING BOARD
–Conductor Side–
– V Board –

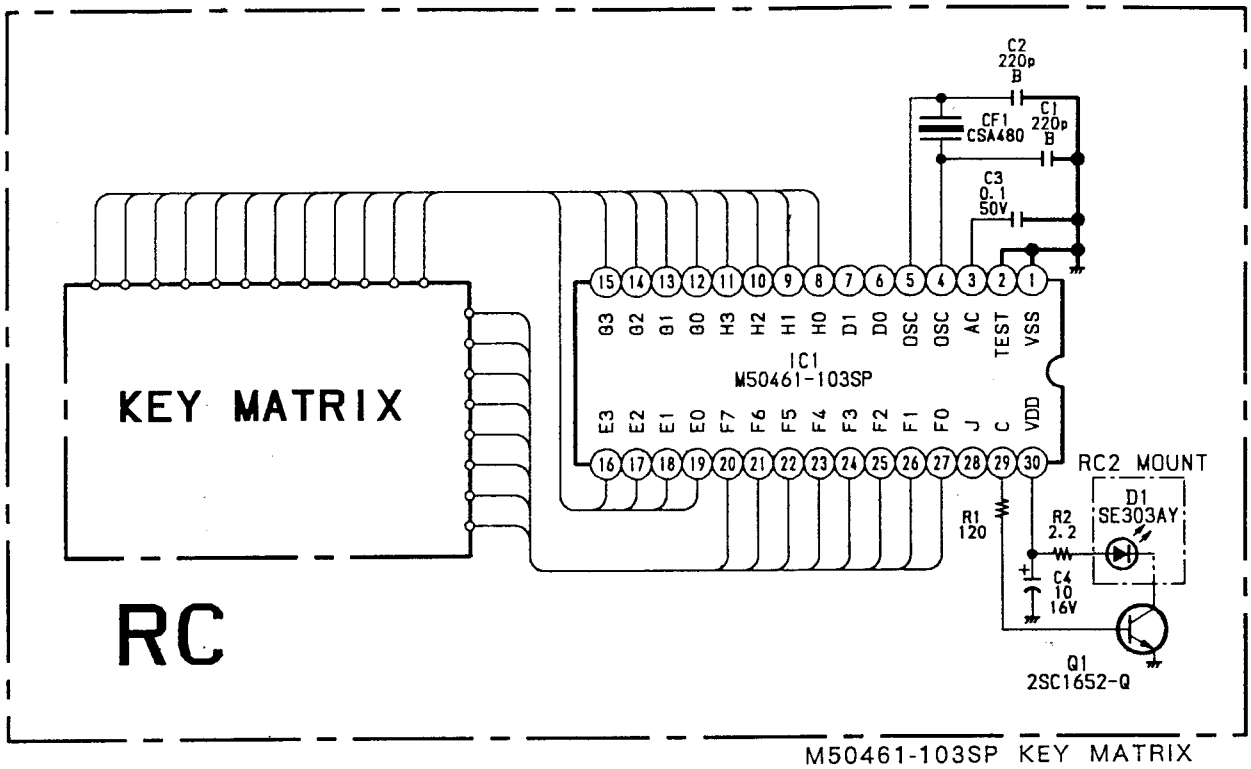


BOARD


SONY
IC01
IC02
IC03
IC04
X01
X02
X03
CP01
CP02
CP03
CP04
CP05
RV01
Q01
Q02
Q03
Q04
Q05
Q06
Q07
Q08
Q09
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q17
D01
D02
D03
D04
D05
D06
D07
D08
D09
D10
D11
D12
L01
L02
L03
L04
L05
L06
L07
L08
L09
L10
V-1
V-2
V-3
V-4
V-5
V-6
V-7
V-8
12V
S-BRT
BLK
R-Y
B-Y
TXD
CLK

MOTE COMMANDER RM-679MTP

1 | 2 | 3 | 4 | 5 | 6 | 7



M50461-103SP KEY MATRIX

n ; KEY number/N ; SIRCS number

KEY input / KEY input	F0	F1	F2	F3	F4	F5	F6	F7
E0	SW1 1	SW2 2	SW3 3	SW4 4	SW5 5	SW6 6	SW7 7	SW8 8
E1	SW9 9	SW10 0	SW11 1-	SW12 2-	SW13 PROG+	SW14 PROG-	SW15 VOL+	SW16 VOL-
E2	SW17 MUTE	SW18 P/C	SW19 STAND BY	SW20	SW21 A/B	SW22	SW23	SW24 TV
E3	SW25 LOUD NESS	SW26 SPACE SURROUND	SW27 TIME (TEXT CL)	SW28 DISPLAY	SW29 VIDEO 1	SW30 VIDEO 2	SW31 VIDEO 3	SW32 TEXT/MIX
G0	SW33	SW34	SW35	SW36	SW37 +	SW38 -	SW39	SW40
G1	SW41 CLEAR	SW42 TV SESTEM	SW43 COL SESTEM	SW44 PRESET	SW45	SW46 SEARCH +	SW47 SEARCH -	SW48
G2	SW49	SW50	SW51	SW52	SW53	SW54	SW55	SW56
G3	SW57 PROGR +	SW58 PROGR -	SW59 P IN P	SW60 FREEZE	SW61 POSITION	SW62 SWAP	SW63 AUTO PROGR	SW64
H0	SW65 OFF	SW66 STOROBE	SW67	SW68 DEMO	SW69 REPLAY	SW70 PROGR INDEX	SW71 SPLIT	SW72
H1	SW73 INDEX	SW74 CHAR HIGHT	SW75 HOLD	SW76 SUB TITLE	SW77 □ (RED)	SW78 □ (GREEN)	SW79 □ (YELLOW)	SW80 □ (CYAN)

CATEGOLY: TV; TV (15bit); TEXT

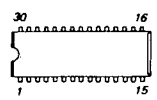
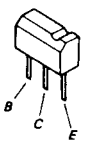
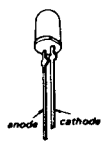
Note :

- All capacitors are in μ F unless otherwise noted. pF : μ μ F 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch : 5mm
  Rating electrical power : 1/4W

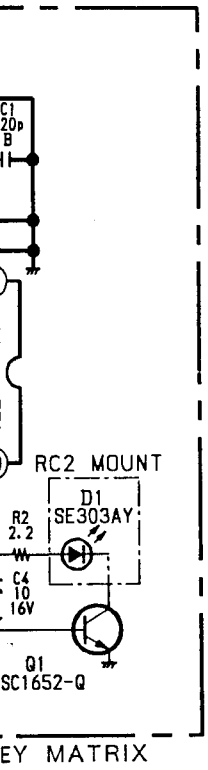
- All resistors are in ohms.

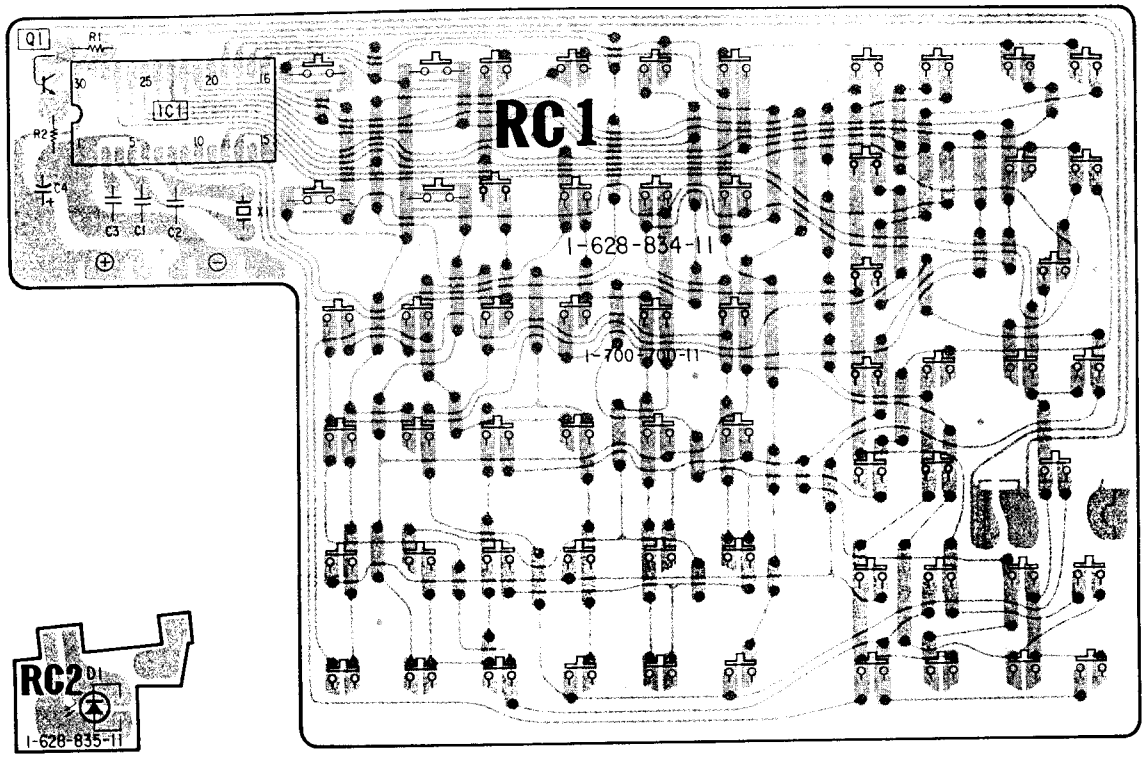
SEMICONDUCTORS

M50461-XXXP	2SC1652-Q	SE303AY
		

RC1 RC2

7





; KEY number/N ; SIRCS number

	F 3	F 4	F 5	F 6	F 7
	SW4 4	SW5 5	SW6 6	SW7 7	SW8 8
	SW12 2−	SW13 PROG+	SW14 PROG−	SW15 VOL+	SW16 VOL−
	SW20	SW21 A/B	SW22	SW23	SW24 TV
	SW28 DISPLAY	SW29 VIDEO 1	SW30 VIDEO 2	SW31 VIDEO 3	SW32 TEXT/MIX
	SW36	SW37 +	SW38 −	SW39	SW40
	SW44 PRESET	SW45	SW46 SEARCH +	SW47 SEARCH −	SW48
	SW52	SW53	SW54	SW55	SW56
	SW60 FREEZE	SW61 POSITION	SW62 SWAP	SW63 AUTO PROGR	SW64
	SW68 DEMO	SW69 REPLAY	SW70 PROGR INDEX	SW71 SPLIT	SW72
	SW76 SUB TITLE	SW77 □ (RED)	SW78 □ (GREEN)	SW79 □ (YELLOW)	SW80 □ (CYAN)

CATEGOLY

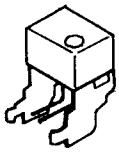
TV

TV (15bit)

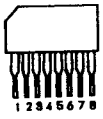
TEXT

SEMICONDUCTORS

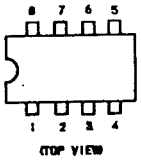
BX1398



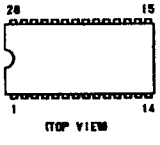
CX20125
LA7016



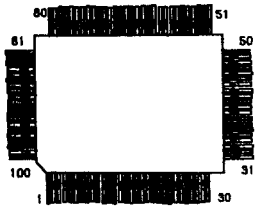
CX23025
MSM5258RS
PCD8582
TEA2031A
μPC393C



CX1114P
MAB8461P-W136
SAA5231-V6
SAB3035
TDA4580
TDA6200
TEA2028A
μPC4364CX-15L

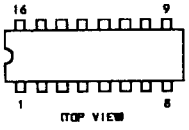


CXD1093Q

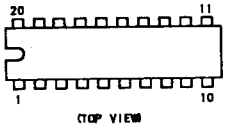


LM1875T
STR90120

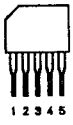
HD14052
MB89009-103
MC74H4053N
MC14053BCP
PCF8574
TC74HC157P
TC74HC174P
TC74HC175P
TC4528BP
μPD141264C-15



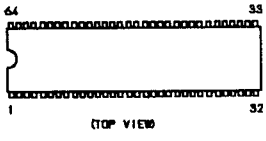
M52678P
TC74HC374P



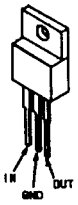
M52681P



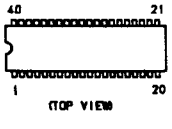
M37100M8-616P



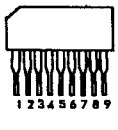
NJM7812FA



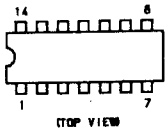
SAA5234E



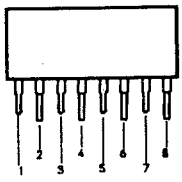
STR-S5941



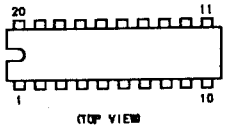
TC74HC00P
TC74HC02P
TC74HC04P
TC74HC4066P
μPC324C



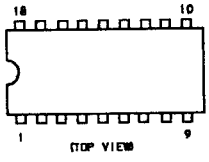
HIC2110



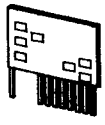
TC74HCT374P



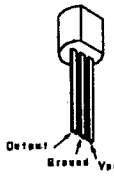
TDA2595-V7



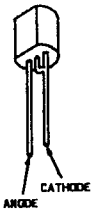
TDA8170



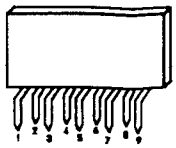
μPC7805J



μPC574J



STR80145



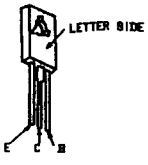
DTA114ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES

2SA1091

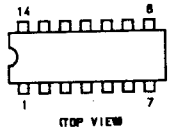
2SA1175
2SC2785

2SA1221
2SB734
2SD774
2SD774

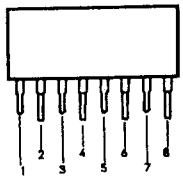
2SC1220A-O
2SC2611
2SC2688



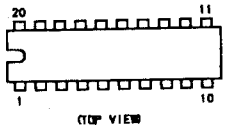
TC74HC00P
TC74HC02P
TC74HC04P
TC74HC4066P
μPC324C



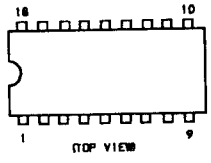
HIC2110



TC74HCT374P

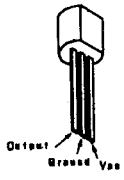


TDA2595-V7

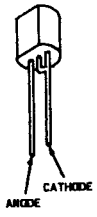


TDA8170

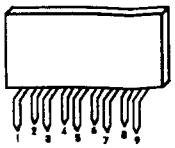
μPC7805J



μPC574J



STR80145



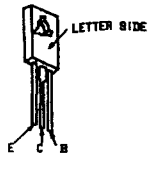
DTA114ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES

2SA1091

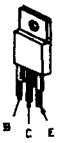
2SA1175
2SC2785

2SA1221
2SB734
2SD774
2SD774

2SC1220A-O
2SC2611
2SC2688

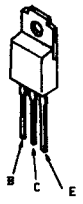


2SC2275
2SC2958
2SC4159



2SC3298A-O

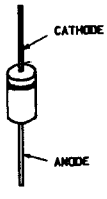
2SC3928B-O
2SD1761



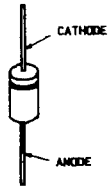
2SD1941

2SK1054

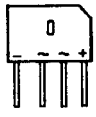
ERA81-004
EU2Z
GP08D
RGP10G
RGP15J



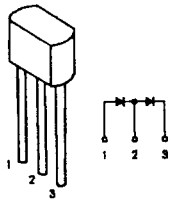
ERB12-01
ERC06-15J
ERD29-08J
R2M
RH-1C
R2KL
RGP01-07
RM11C
RU-3AM
RU-4Z-K2
S1B01-02



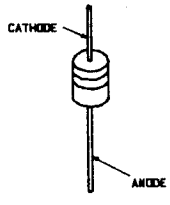
KBU4JL-6088



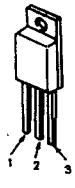
MC931



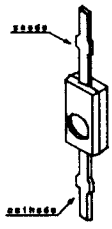
RD3.9ES-B1
RD4.7ES-B2
RD5.6ES-B2
RD6.2ES-B2
RD7.5ES-B2
RD9.1ES-B2
RD10ES-B2
RD11ES-B2
RD13ES-B2
1SS119



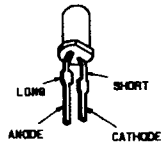
TCU-125



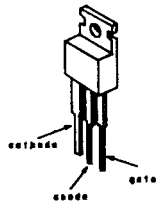
IT33



TLR124



5P4M

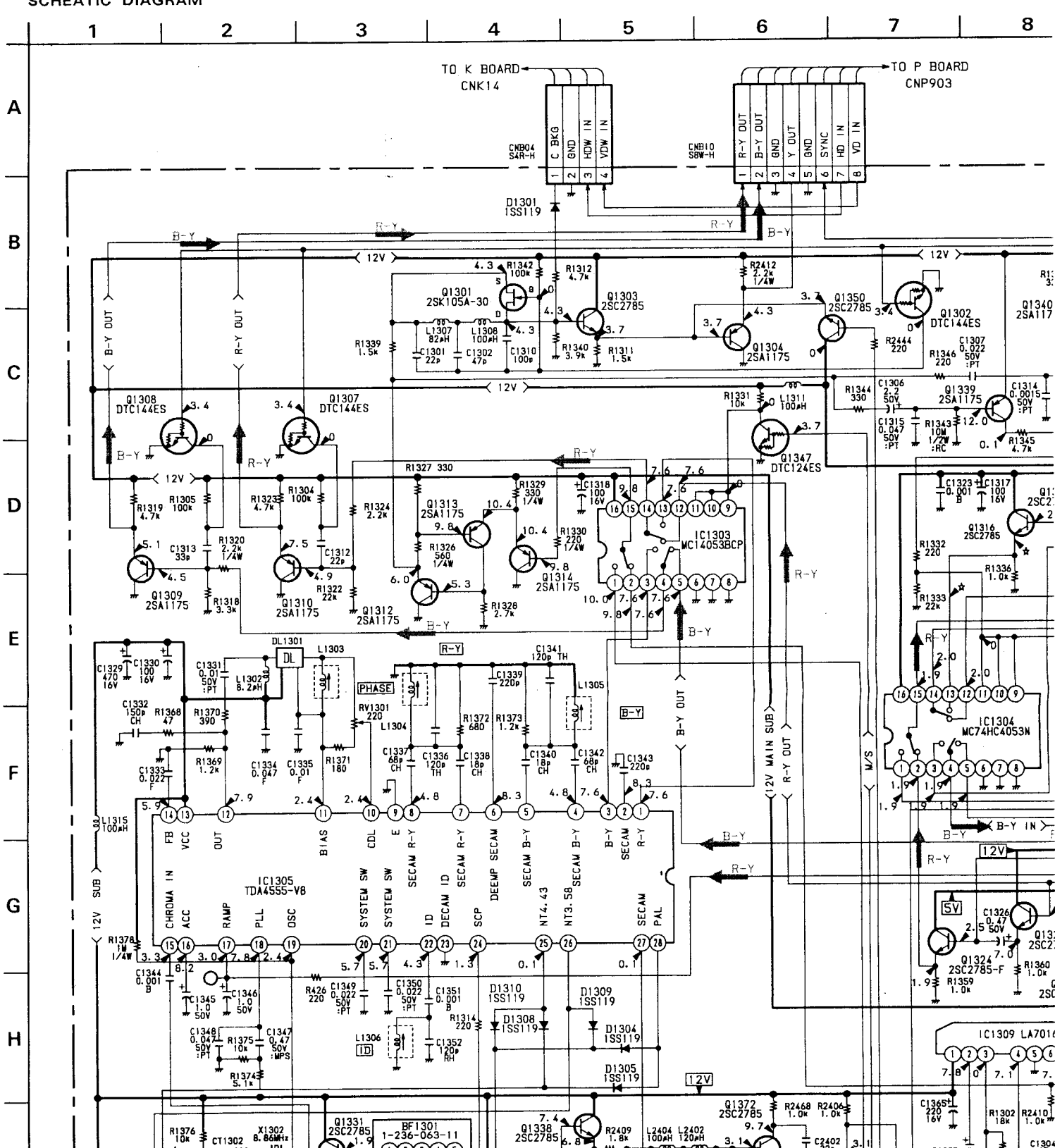


●B BOARD WAVEFORM

① 0.68Vp-p (7.1MHz)	⑧ 5.0 Vp-p (H)
② 0.9 Vp-p (H)	⑨ 5.2 Vp-p (H)
③ 1.1 Vp-p (H)	⑩ 0.3 Vp-p (H)
④ 1.3 Vp-p (H)	⑪ 0.9 Vp-p (H)
⑤ 0.15Vp-p (H)	⑫ 1.2 Vp-p (H)
⑥ 0.3 Vp-p (H)	⑬ 1.2 Vp-p (H)
⑦ 4.4 Vp-p (H)	⑭ 4.0 Vp-p (V)

As to the voltage volue shown by the mark ☆ on the Schematic Diagram, see the another list.

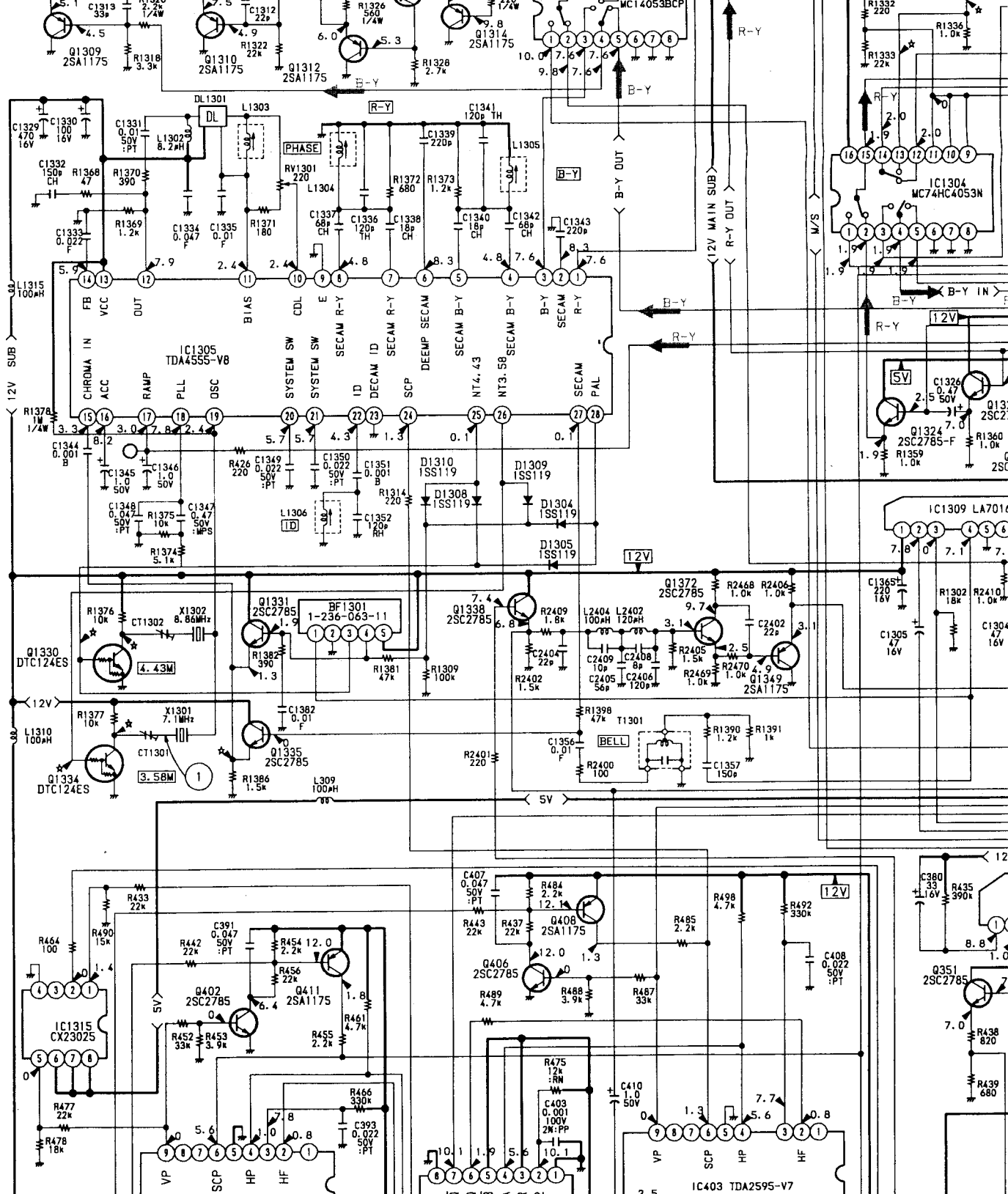
	PAL	SECAM	NTSC3.58	NTSC4.43
IC301 ②	4.1V	0.1V	4.1V	4.1V
IC301 ⑧	0.1V	10.9V	0.1V	0.1V
IC331 ⑤	6.6V	4.1V	6.1V	5.7V
IC331 ⑦	6.4V	4.1V	5V	5.4V
IC331 ⑱	7.9V	3.9V	7.9V	7.9V
IC331 ⑲	2.4V	9.1V	2.4V	2.4V
IC331 ⑳	5.7V	5.7V	7.5V	7.4V
IC331 ㉑	7.9V	6.9V	5.6V	5.7V



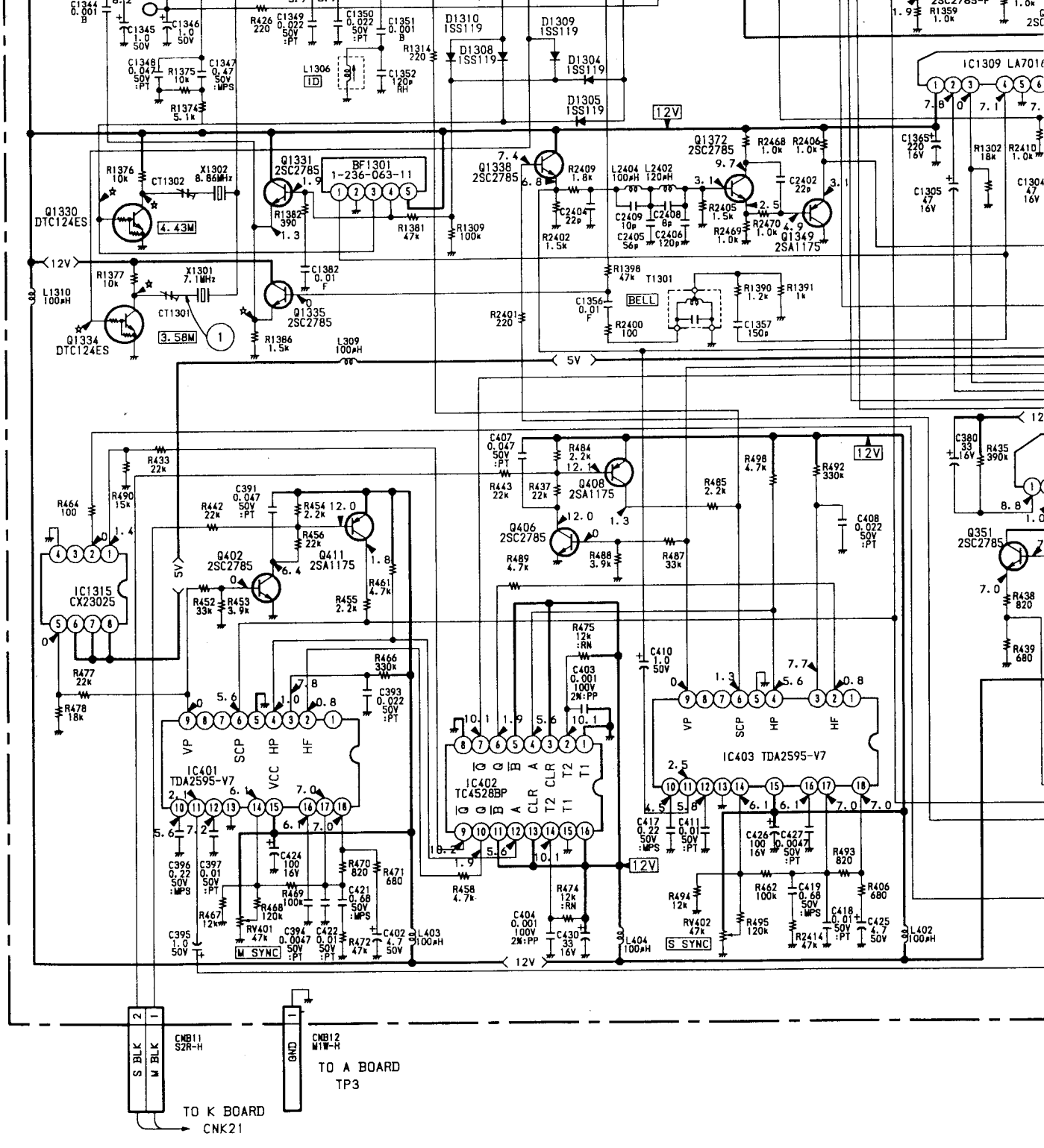
0.15 Vp-p (H)	1.2 Vp-p (H)
⑥ 0.3 Vp-p (H)	⑬ 1.2 Vp-p (H)
⑦ 4.4 Vp-p (H)	⑭ 4.0 Vp-p (V)

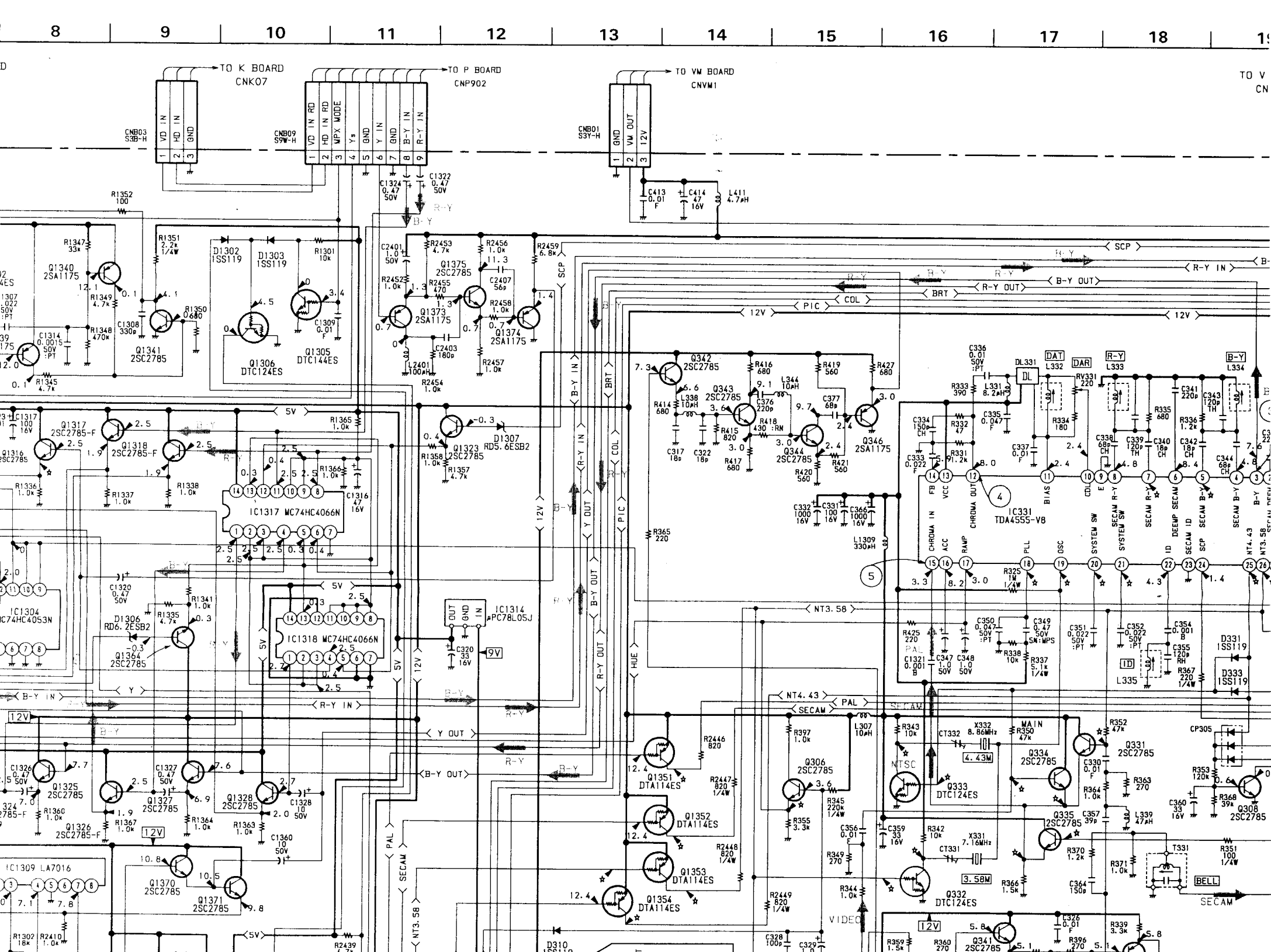
As to the voltage volue shown by the mark ☆ on the Schematic Diagram, see the another list.

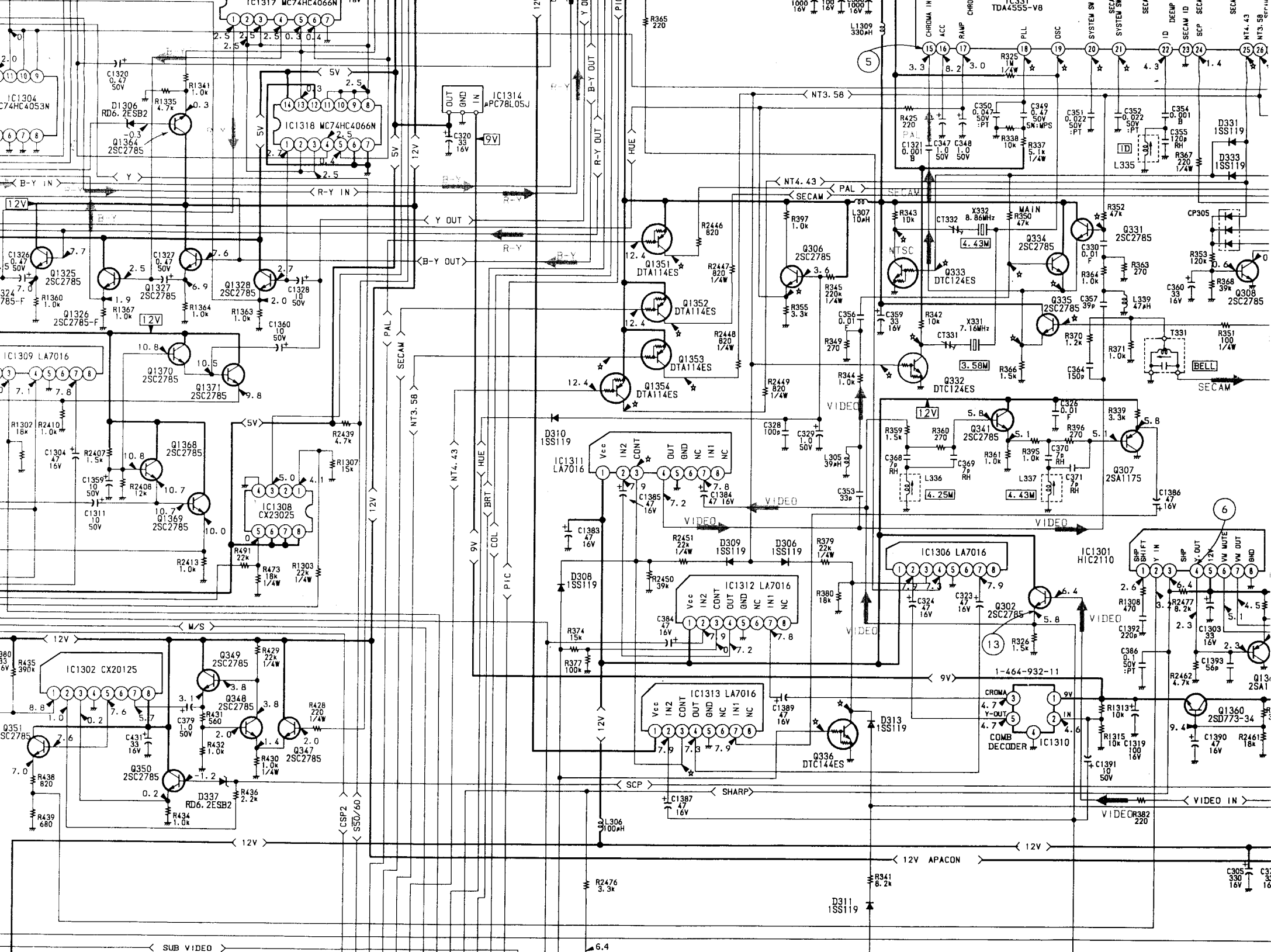
	PAL	SECAM	NTSC3.58	NTSC4.43
IC301 ②	4.1V	0.1V	4.1V	4.1V
IC301 ⑧	0.1V	10.9V	0.1V	0.1V
IC331 ⑤	6.6V	4.1V	6.1V	5.7V
IC331 ⑦	6.4V	4.1V	5V	5.4V
IC331 ⑱	7.9V	3.9V	7.9V	7.9V
IC331 ⑲	2.4V	9.1V	2.4V	2.4V
IC331 ⑳	5.7V	5.7V	7.5V	7.4V
IC331 ㉑	7.9V	6.9V	5.6V	5.7V
IC331 ㉕	0.1V	5.8V	0.1V	0.1V
IC331 ㉖	0V	11.3V	0V	0V
IC331 ㉗	0.1V	5.9V	0.1V	0.1V
IC331 ㉘	5.8V	0.1V	0.1	0.1V
IC1304 ⑬	1.9V	2.2V	1.9V	1.9V
IC1305 ⑤	6.6V	6.5V	6.3V	5.7V
IC1305 ⑦	6.4V	6.5V	6.1V	5.4V
IC1305 ㉖	2.5V	0.1V	2.5V	2.5V
IC1305 ㉘	0.1V	2.4V	0.1V	0.1V
IC1306 ③	0V	4.8V	0V	0V
IC1311 ③	0V	6.8V	0V	0V
IC1313 ③	0V	6.7V	0V	0V
Q306 (E)	11.3V	12.3V	11.3V	11.3V
Q331 (B)	0.1V	10.3V	0.1V	0.1V
(E)	4.3V	4.8V	9.7V	4.3V
Q332 (B)	0.1V	11.3V	0.1V	0.1V
(C)	11.8V	0V	11.8V	11.8V
Q333 (B)	5.3V	0V	0.7V	5.3V
(C)	0V	12.1V	12.1V	0V
Q334 (B)	4.9V	0V	1.4V	4.9V

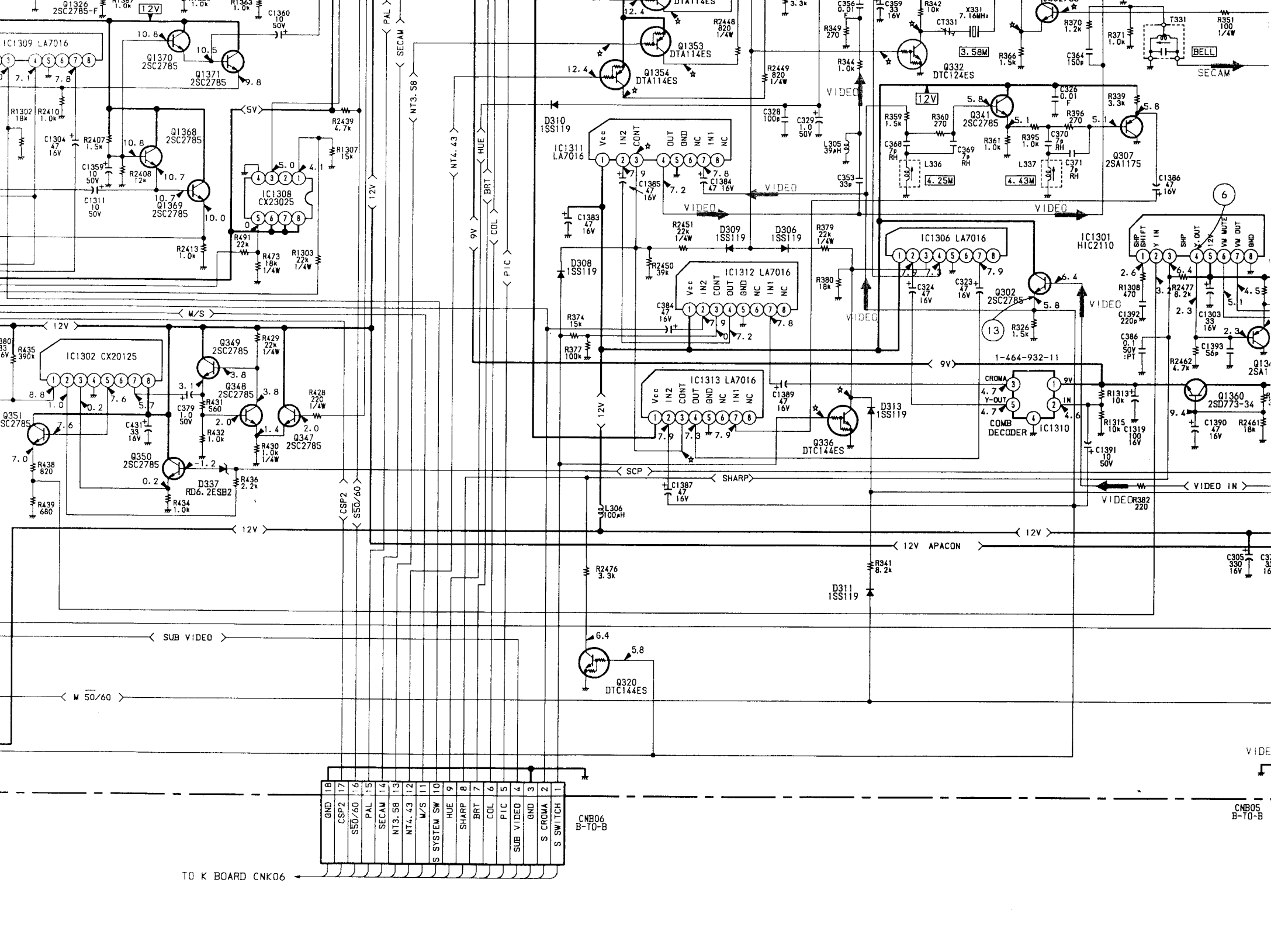


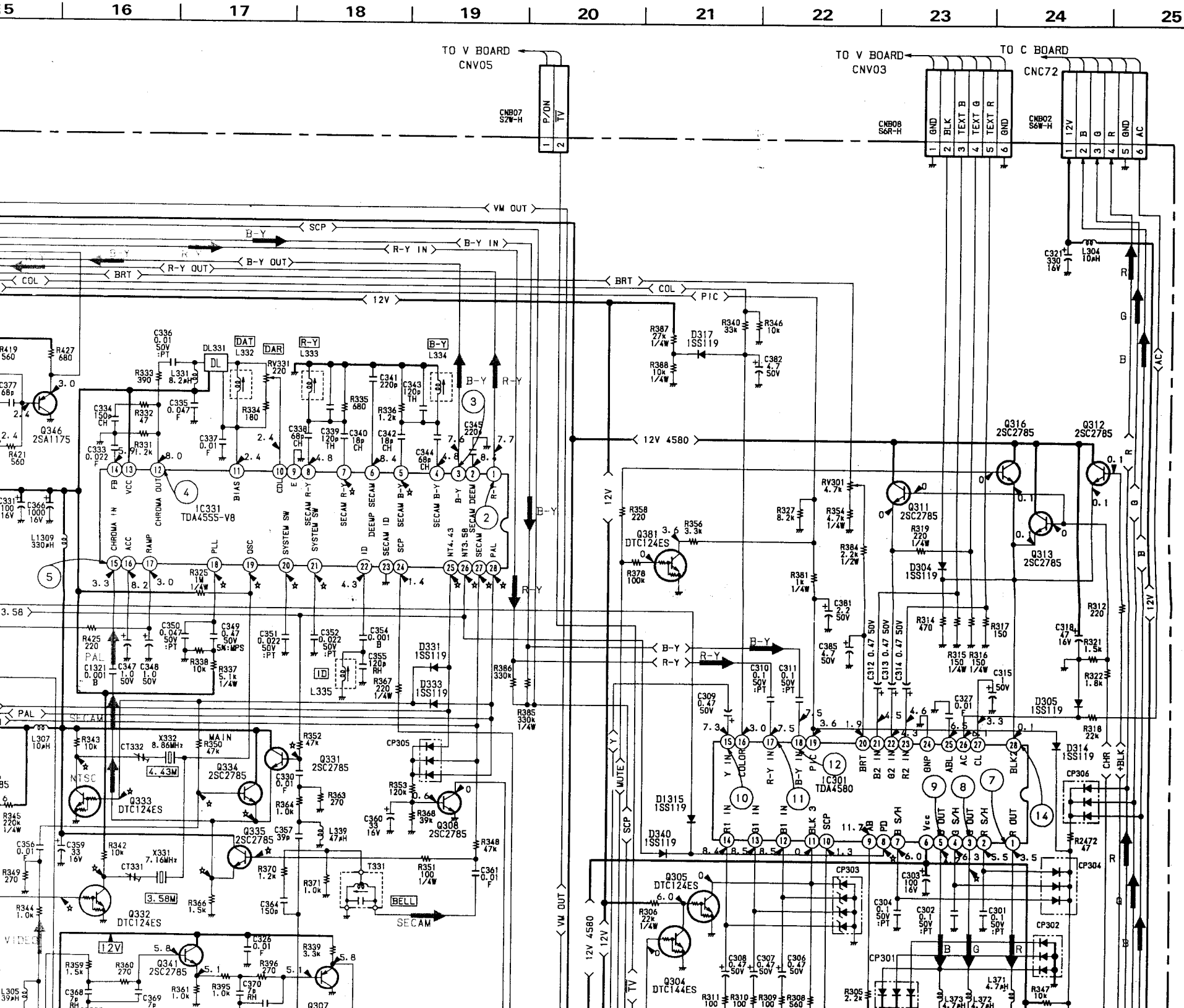
IC301 ⑧	0.1V	10.9V	0.1V	0.1V
IC331 ⑤	6.6V	4.1V	6.1V	5.7V
IC331 ⑦	6.4V	4.1V	5V	5.4V
IC331 ⑱	7.9V	3.9V	7.9V	7.9V
IC331 ⑲	2.4V	9.1V	2.4V	2.4V
IC331 ⑳	5.7V	5.7V	7.5V	7.4V
IC331 ㉑	7.9V	6.9V	5.6V	5.7V
IC331 ㉕	0.1V	5.8V	0.1V	0.1V
IC331 ㉖	0V	11.3V	0V	0V
IC331 ㉗	0.1V	5.9V	0.1V	0.1V
IC331 ㉘	5.8V	0.1V	0.1	0.1V
IC1304 ⑬	1.9V	2.2V	1.9V	1.9V
IC1305 ⑤	6.6V	6.5V	6.3V	5.7V
IC1305 ⑦	6.4V	6.5V	6.1V	5.4V
IC1305 ㉖	2.5V	0.1V	2.5V	2.5V
IC1305 ㉘	0.1V	2.4V	0.1V	0.1V
IC1306 ③	0V	4.8V	0V	0V
IC1311 ③	0V	6.8V	0V	0V
IC1313 ③	0V	6.7V	0V	0V
Q306 (E)	11.3V	12.3V	11.3V	11.3V
Q331 (B)	0.1V	10.3V	0.1V	0.1V
(E)	4.3V	4.8V	9.7V	4.3V
Q332 (B)	0.1V	11.3V	0.1V	0.1V
(C)	11.8V	0V	11.8V	11.8V
Q333 (B)	5.3V	0V	0.7V	5.3V
(C)	0V	12.1V	12.1V	0V
Q334 (B)	4.9V	0V	1.4V	4.9V
(E)	4.3V	4.8V	9.7V	4.3V
Q335 (B)	0.1V	5.4V	1.3V	0.1V
(E)	4.3V	4.8V	9.7V	4.3V
Q336 (B)	0V	9.4V	0V	0V
(C)	0V	4.8V	0V	0V
Q1316 (E)	1.9V	2.2V	1.9V	1.9V
Q1330 (B)	1.9V	1.9V	0V	0V
(E)	0V	0V	12V	12V
Q1334 (B)	0V	0V	2.5V	2.5V
(C)	12V	12V	0V	0V
Q1335 (E)	1.3V	1.9V	1.3V	1.9V
Q1351 (C)	5.8V	0.1V	0.1V	0.1V
Q1352 (C)	0V	5.9V	0V	0V
Q1353 (B)	12.4V	12.4V	1.1V	12.4V
(C)	0V	0V	12.2V	0V
Q1354 (C)	0.1V	0.1V	0.1V	5.8V

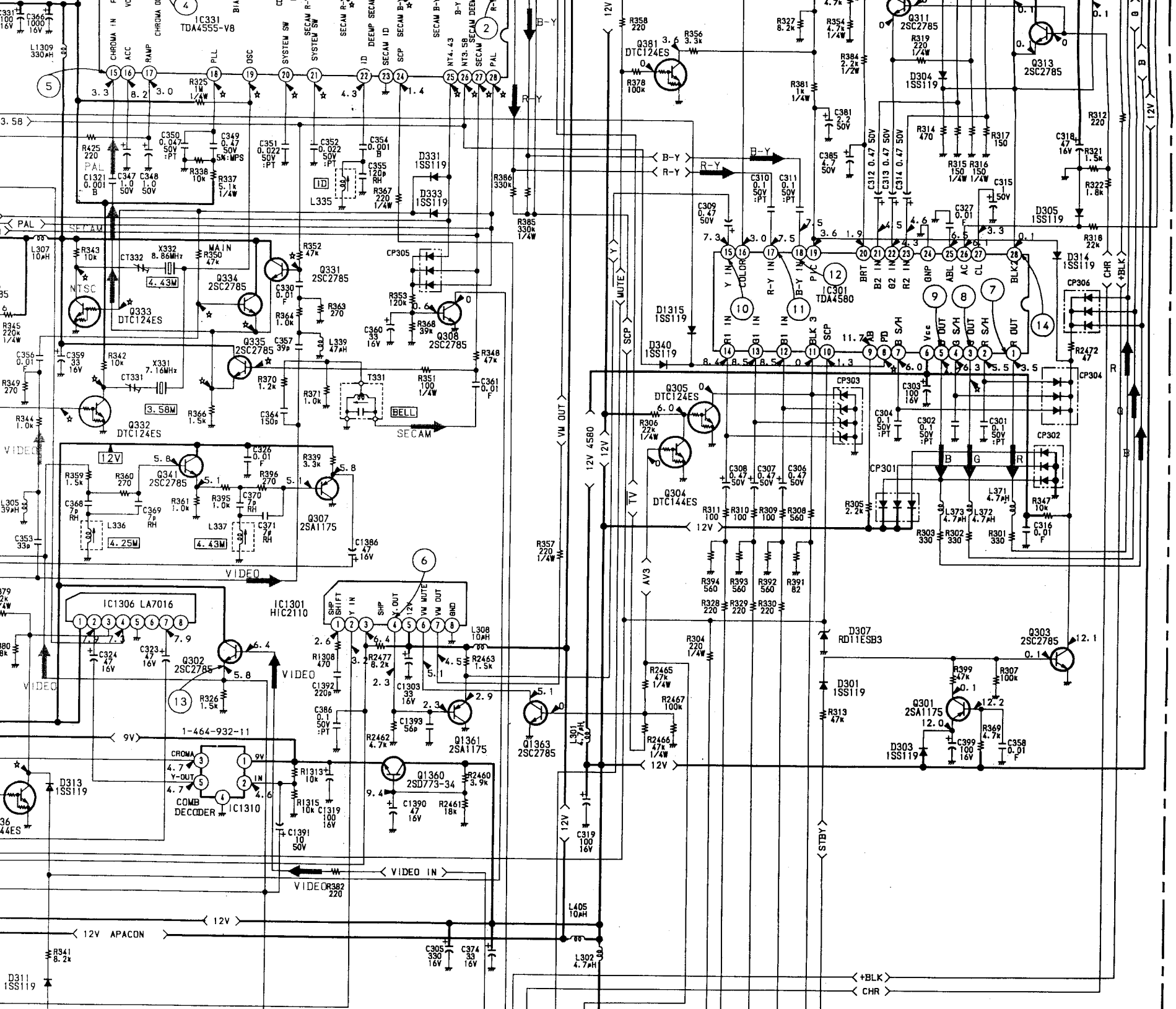


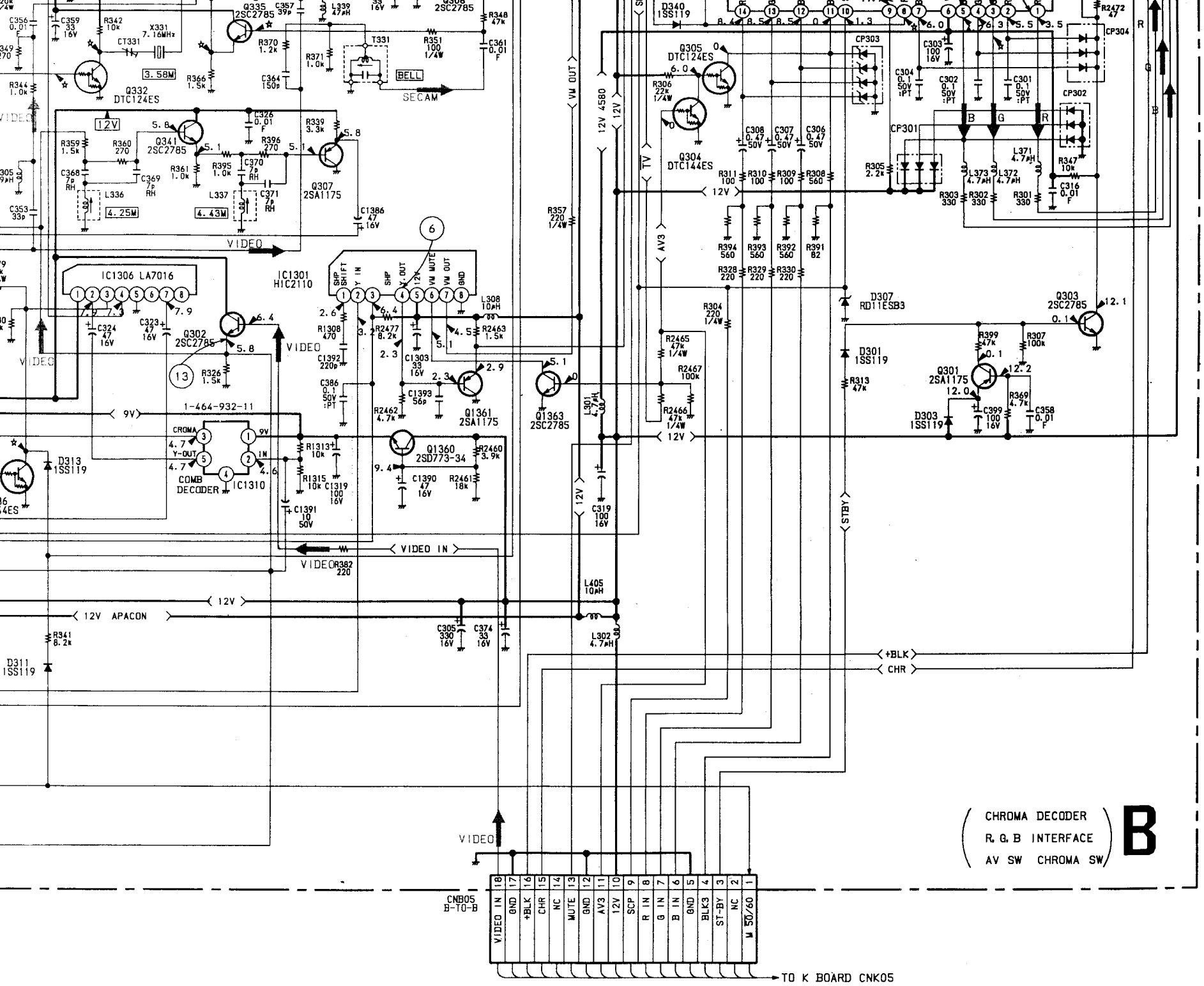

8
9
10
11
12
13
14
15
16
17
18
TO K BOARD
CNK07
TO P BOARD
CNP902
TO VM BOARD
CNVM1
CNB03
S3B-H
VD IN
HD IN
GND
CNB09
S9W-H
VD IN RD
HD IN RD
WPX MODE
Ys
GND
Y IN
GND
B-Y IN
R-Y IN
CNB01
S3Y-H
GND
VM OUT
12V
IC1317 MC74HC4066N
IC1318 MC74HC4066N
IC1314 μPC78L05J
IC1309 LA7016
IC1304 MC74HC4053N
IC1331 TDA4555-V8
Q1340 2SA1175
Q1341 2SC2785
Q1306 DTC124ES
Q1305 DTC144ES
Q1373 2SA1175
Q1375 2SC2785
Q1374 2SA1175
Q1342 2SC2785
Q1343 2SC2785
Q1344 2SC2785
Q1346 2SA1175
Q1323 2SC2785
Q1317 2SC2785-F
Q1318 2SC2785-F
Q1364 2SC2785
Q1325 2SC2785
Q1327 2SC2785
Q1328 2SC2785
Q1326 2SC2785-F
Q1370 2SC2785
Q1371 2SC2785
Q1351 DTA114ES
Q1352 DTA114ES
Q1353 DTA114ES
Q1354 DTA114ES
Q306 2SC2785
Q333 DTC124ES
Q334 2SC2785
Q335 2SC2785
Q331 2SC2785
Q308 2SC2785
Q332 DTC124ES
Q341 2SC2785
D1302 1SS119
D1303 1SS119
D1307 RD5.6ESB2
D1306 RD6.2ESB2
D331 1SS119
D333 1SS119
L411 4.7μH
L1309 330μH
L307 10μH
L331 8.2μH
L332
L333
L334
L335
L339 47μH
T331
X332 8.86MHz
X331 7.16MHz
CT332
CT331
4.43M
3.58M
MAIN
NTSC
PAL
SECAM
BELL
DL331
DL
DAT
DAR
R-Y
B-Y
SCP
PIC
COL
BRT
12V
5V
9V
R-Y IN
B-Y IN
Y OUT
B-Y OUT
R-Y OUT
NT3.58
NT4.43
HUE
VIDEO
Y
ID
CHROMA IN
ACC
RAMP
CHROMA OUT
BIAS
PLL
OSC
SYSTEM SW
SECAM R-Y
SECAM B-Y
DEEMP SECAM
SECAM ID
FB
VCC
E
CDL


IC1317 MC74HC4066N
IC1304 C74HC4053N
IC1318 MC74HC4066N
IC1314 μPC78L05J
IC1331 TDA4555-V8
IC1309 LA7016
IC1308 CX23025
IC1311 LA7016
IC1312 LA7016
IC1313 LA7016
IC1306 LA7016
IC1301 HIC2110
IC1302 CX20125
IC1310 COMB DECODER
1-464-932-11
Q1325 2SC2785
Q1326 2SC2785-F
Q1327 2SC2785
Q1328 2SC2785
Q1351 DTA114ES
Q1352 DTA114ES
Q1353 DTA114ES
Q1354 DTA114ES
Q306 2SC2785
Q333 DTC124ES
Q332 DTC124ES
Q334 2SC2785
Q335 2SC2785
Q331 2SC2785
Q308 2SC2785
Q307 2SA1175
Q341 2SC2785
Q302 2SC2785
Q1360 2SD773-34
Q336 DTC144ES
Q1368 2SC2785
Q1369 2SC2785
Q1370 2SC2785
Q1371 2SC2785
Q349 2SC2785
Q348 2SC2785
Q347 2SC2785
Q350 2SC2785
Q351 2SC2785
D1306 RD6.2ESB2
D337 RD6.2ESB2
D310 1SS119
D309 1SS119
D306 1SS119
D308 1SS119
D313 1SS119
D311 1SS119
D331 1SS119
D333 1SS119
12V
9V
5V
B-Y IN
R-Y IN
Y
Y OUT
B-Y OUT
R-Y
B-Y
R-Y OUT
HUE
PAL
SECAM
NT4.43
NT3.58
BRT
COL
PIC
VIDEO
M/S
SCP
SHARP
SUB VIDEO
VIDEO IN
12V APACON
NTSC
4.43M
3.58M
4.25M
BELL
ID
CHROMA IN
ACC
RAMP
PLL
OSC
SYSTEM SW
SECAM ID
DEEMP
SCP
SECAM
NT4.43
NT3.58
X332 8.86MHz
X331 7.16MHz
CT332
CT331
L307 10μH
L305 39μH
L306 100μH
L309 330μH
L335
L336
L337
L339 47μH
T331
CP305


IC1309 LA7016
IC1308 CX23025
IC1311 LA7016
IC1312 LA7016
IC1313 LA7016
IC1306 LA7016
IC1301 HIC2110
IC1302 CX20125
IC1310 COMB DECODER
Q1326 2SC2785-F
Q1370 2SC2785
Q1371 2SC2785
Q1368 2SC2785
Q1369 2SC2785
Q1353 DTA114ES
Q1354 DTA114ES
Q332 DTC124ES
Q341 2SC2785
Q307 2SA1175
Q302 2SC2785
Q349 2SC2785
Q348 2SC2785
Q347 2SC2785
Q350 2SC2785
Q351 2SC2785
Q336 DTC144ES
Q320 DTC144ES
Q1360 2SD773-34
D337 RD6.2ESB2
D310 1SS119
D309 1SS119
D306 1SS119
D308 1SS119
D313 1SS119
D311 1SS119
12V
5V
9V
M/S
SECAM
PAL
NT3.58
NT4.43
HUE
BRT
COL
PIC
SCP
SHARP
CSP2
S50/60
VIDEO
SUB VIDEO
M 50/60
12V APACON
VIDEO IN
BELL
1-464-932-11
X331 7.16MHz
CT331
T331
3.58M
4.25M
4.43M
L306 100μH
L305 39μH
L336
L337
CNB06 B-TO-B
CNB05 B-TO-B
TO K BOARD CNK06
GND
CSP2
S50/60
PAL
SECAM
NT3.58
NT4.43
W/S
S SYSTEM SW
HUE
SHARP
BRT
COL
PIC
SUB VIDEO
GND
S CHROMA
S SWITCH


15
16
17
18
19
20
21
22
23
24
25
TO V BOARD
CNV05
CNB07
S2W-H
P/ON
TV
TO V BOARD
CNV03
CNB08
S6R-H
GND
BLK
TEXT B
TEXT G
TEXT R
GND
TO C BOARD
CNC72
CNB02
S6W-H
12V
B
G
R
GND
AC
VM OUT
SCP
B-Y
R-Y IN
B-Y IN
B-Y OUT
R-Y OUT
BRT
COL
12V
PIC
12V 4580
DAT
DAR
R-Y
B-Y
DL331
DL
L332
L333
L334
RV331
220
L331
8.2μH
IC331
TDA4555-V8
CHROMA IN
ACC
RAMP
PLL
OSC
SYSTEM SW
SECAM SW
SECAM R-Y
DEEMP SECAM
SECAM ID
SCP
SECAM B-Y
SECAM DEEM
PAL
CHROMA OUT
BIAS
CDL
FB
VCC
Q346
2SA1175
Q381
DTC124ES
Q316
2SC2785
Q312
2SC2785
Q311
2SC2785
Q313
2SC2785
D317
1SS119
D304
1SS119
D305
1SS119
D314
1SS119
D331
1SS119
D333
1SS119
D1315
1SS119
D340
1SS119
IC301
TDA4580
Y IN
COLOR
R-Y IN
B-Y IN
PIC
BRT
G2 IN
R2 IN
GND
ABL
AC
CL
BLK
R1 IN
B1 IN
BLK 3
SCP
PD
Vcc
R OUT
B S/H
G OUT
R S/H
B OUT
PAL
SECAM
NTSC
MAIN
X332
8.86MHz
4.43M
X331
7.16MHz
3.58M
CT332
CT331
Q333
DTC124ES
Q334
2SC2785
Q331
2SC2785
Q335
2SC2785
Q308
2SC2785
Q332
DTC124ES
Q341
2SC2785
Q307
T331
BELL
SECAM
Q305
DTC124ES
Q306
DTC144ES
CP301
CP302
CP303
CP304
CP305
CP306
L304
10μH
L307
10μH
L1309
330μH
L305
39μH
L339
47μH
L371
4.7μH
L372
4.7μH
L373
4.7μH
C321
330
16V
C382
4.7
50V
C381
2.2
50V
C385
4.7
50V
C309
0.47
50V
C310
0.1
50V
:PT
C311
0.1
50V
:PT
C312
0.47
50V
C313
0.47
50V
C314
0.47
50V
C315
50V
C327
0.01
C318
47
16V
C303
100
16V
C304
0.1
50V
:PT
C302
0.1
50V
:PT
C301
0.1
50V
:PT
C306
0.47
50V
C307
0.47
50V
C308
0.47
50V
C1321
0.001
B
C347
1.0
50V
C348
1.0
50V
C349
0.47
50V
C350
0.047
50V
:PT
C351
0.022
50V
:PT
C352
0.022
50V
:PT
C354
0.001
B
C355
120p
RH
C330
0.01
C326
0.01
C356
0.01
C357
39p
C359
33
16V
C360
33
16V
C361
0.01
C364
150p
C368
7p
RH
C369
7p
C370
7p
RH
C333
0.022
C334
150p
CH
C335
0.047
C336
0.01
50V
:PT
C337
0.01
C338
68p
CH
C339
120p
TH
C340
18p
CH
C341
220p
C342
18p
CH
C343
120p
TH
C344
68p
CH
C345
220p
C377
68p
C366
1000
16V
R419
560
R421
560
R427
680
R331
1.2k
R332
47
R333
390
R334
180
R335
680
R336
1.2k
R337
5.1k
1/4W
R338
10k
R339
3.3k
R340
33k
R342
10k
R343
10k
R344
1.0k
R345
220k
1/4W
R346
10k
R348
47k
R349
270
R350
47k
R352
47k
R353
120k
R356
3.3k
R358
220
R359
1.5k
R360
270
R361
1.0k
R363
270
R364
1.0k
R366
1.5k
R367
220
1/4W
R368
39k
R371
1.0k
R378
100k
R384
2.2k
1/2W
R386
330k
R387
27k
1/4W
R388
10k
1/4W
R395
1.0k
R396
270
R425
220
R1309
330
R2472
47
R301
4.7k
R305
2.2k
R306
22k
1/4W
R308
560
R309
100
R310
100
R311
100
R312
220
R314
470
R315
150
1/4W
R316
150
1/4W
R317
150
R318
22k
R319
220
1/4W
R321
1.5k
R322
1.8k
R327
8.2k
R354
4.7k
1/4W
R381
1k
1/4W
R385
330k
1/4W
R386
330k
R347
10k
R348
47k
R349
270
R361


IC331
TDA4555-V8
IC1301
HIC2110
IC1306 LA7016
IC301
TDA4580
IC1310
COMB
DECODER
1-464-932-11
NTSC
PAL
SECAM
VIDEO
VIDEO IN
12V
12V APACON
9V
+BLK
CHR
B-Y
R-Y
Y
MUTE
SCP
TV
AV3
STBY
VM OUT
BELL
Q331 2SC2785
Q334 2SC2785
Q333 DTC124ES
Q335 2SC2785
Q332 DTC124ES
Q341 2SC2785
Q307 2SA1175
Q302 2SC2785
Q1361 2SA1175
Q1363 2SC2785
Q1360 2SD773-34
Q308 2SC2785
Q305 DTC124ES
Q304 DTC144ES
Q311 2SC2785
Q313 2SC2785
Q303 2SC2785
Q301 2SA1175
D307 RD11ESB3
D313 1SS119
D311 1SS119
D331 1SS119
D333 1SS119
D1315 1SS119
D340 1SS119
D304 1SS119
D305 1SS119
D314 1SS119
D301 1SS119
D303 1SS119
L335
T331
L336
L337
L339
L371
L372
L373
L301
L302
L305
L307
L308
L405
X332 8.86MHz
X331 7.16MHz
CT332
CT331
4.43M
3.58M
4.25M
4.43M
CP301
CP302
CP303
CP304
CP305
CP306


IC1306 LA7016
IC1301
HIC2110
IC1310
COMB DECODER
Q1360 2SD773-34
Q1361 2SA1175
Q1363 2SC2785
Q302 2SC2785
Q303 2SC2785
Q304 DTC144ES
Q305 DTC124ES
Q307 2SA1175
Q332 DTC124ES
Q335 2SC2785
Q341 2SC2785
Q301 2SA1175
D307 RD11ESB3
D301 1SS119
D303 1SS119
D311 1SS119
D313 1SS119
D340 1SS119
CP301
CP302
CP303
CP304
T331
X331 7.16MHz
CT331
BELL
SECAM
VIDEO
VIDEO IN
VIDEO OUT
12V
12V APACON
9V
AV3
TV
STBY
+BLK
CHR
1-464-932-11
CNB05
B-TO-B
VIDEO IN
GND
+BLK
CHR
NC
MUTE
GND
AV3
12V
SCP
R IN
G IN
B IN
GND
BLK3
ST-BY
NC
50/60
TO K BOARD CNK05
CHROMA DECODER
R, G, B INTERFACE
AV SW CHROMA SW
B