

SONY



COMPUTER
ENTERTAINMENT

SCPH-7500 SERIES

SERVICE MANUAL

Japan Model

SCPH-7500

US/Canada Model

SCPH-7501

Australia Model

SCPH-7502A

UK Model

SCPH-7502B

AEP Model

SCPH-7502C

Asian Model

SCPH-7503

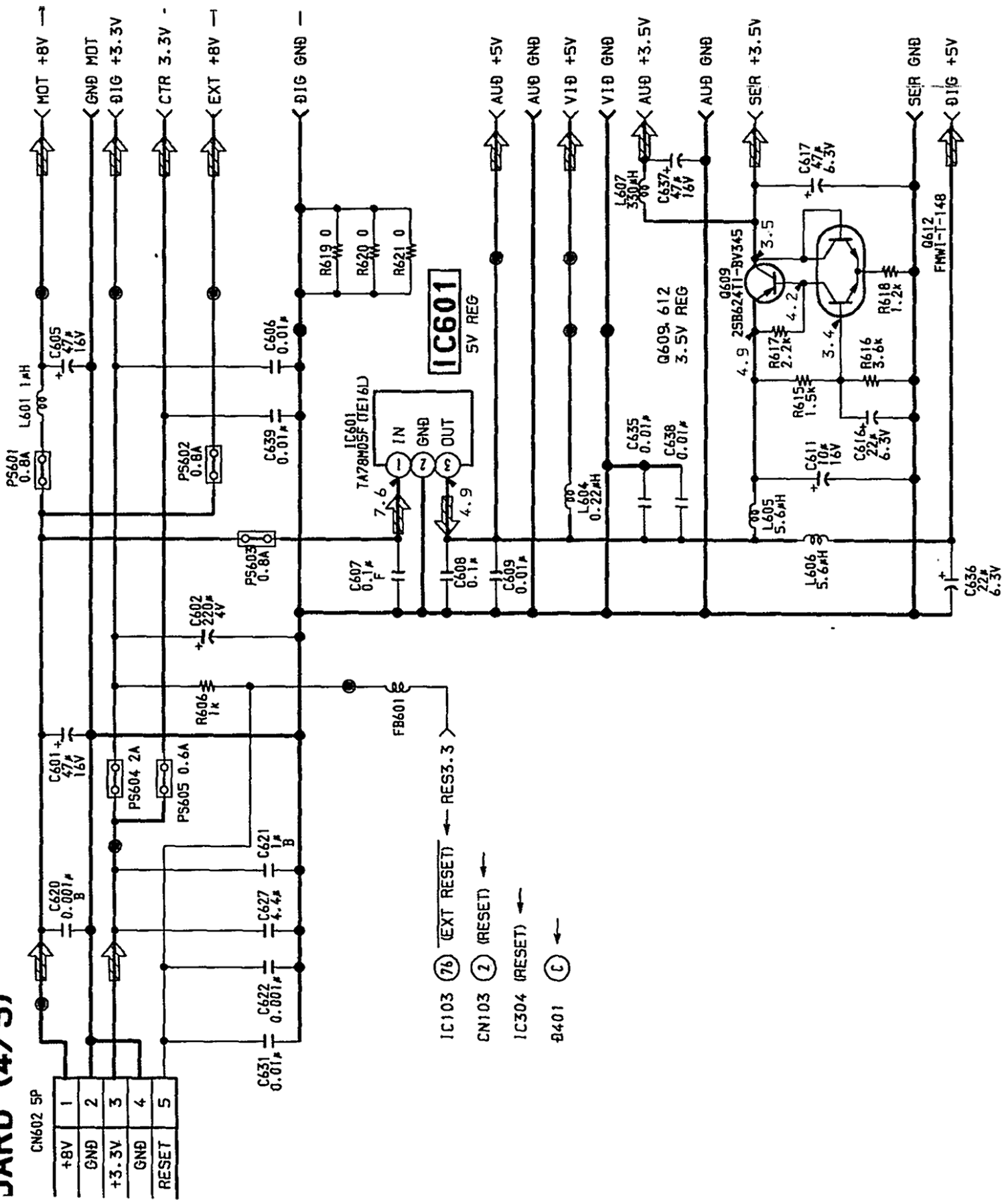
3rd Edition



Reproduction prohibited

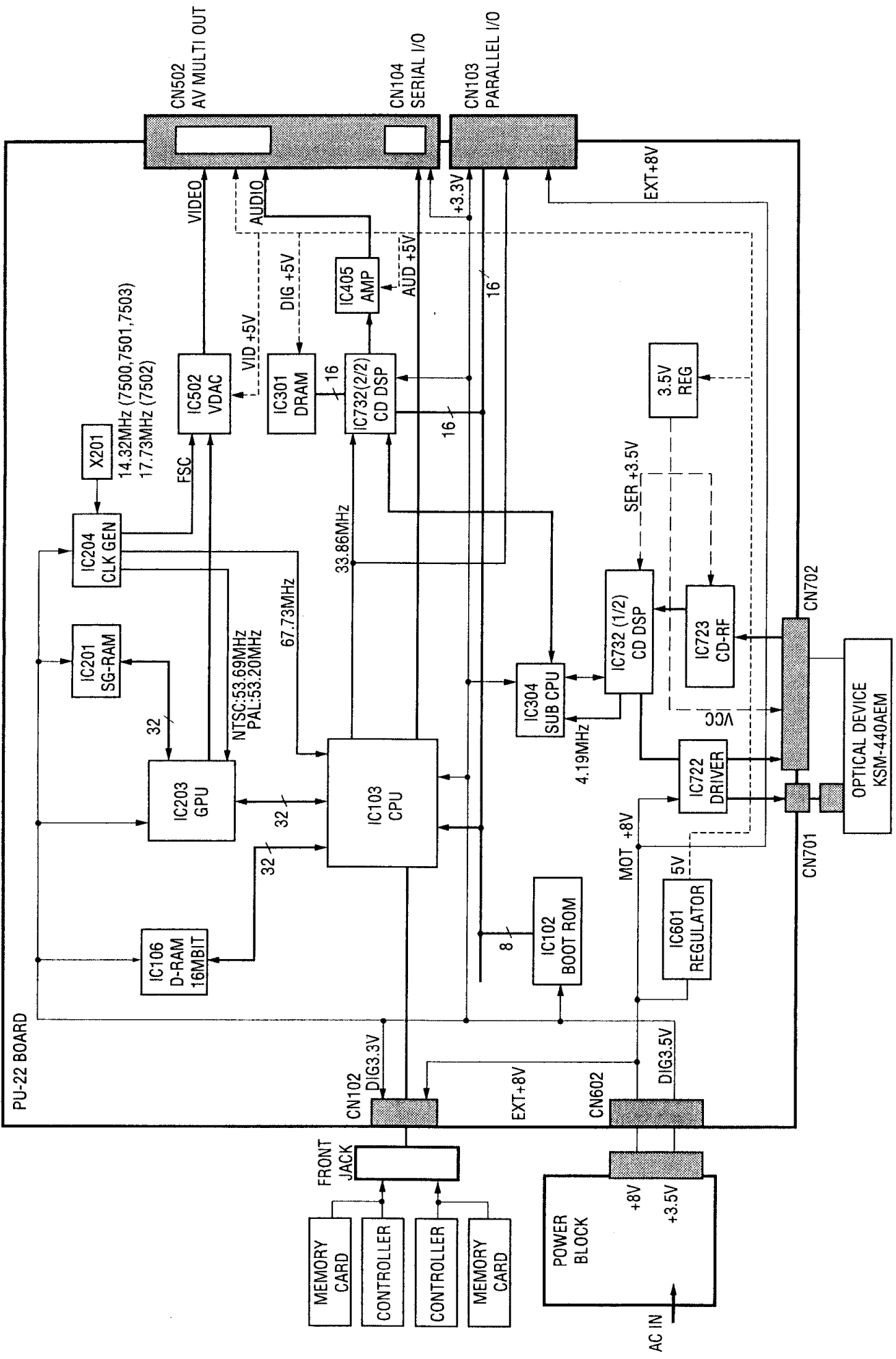
Registered No.

PlayStation



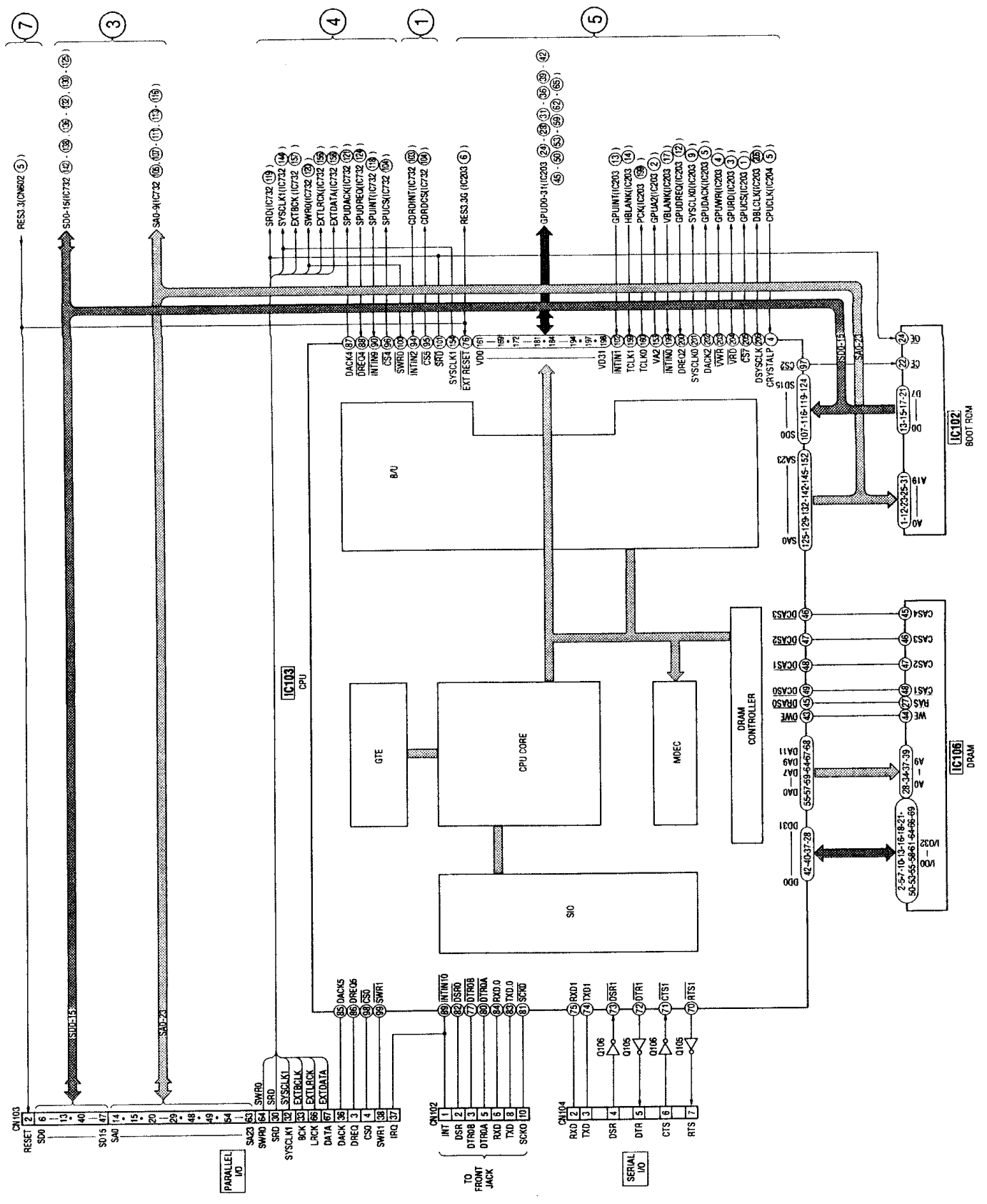
SECTION 5
BLOCK DIAGRAMS

5-1. OVERALL BLOCK DIAGRAM

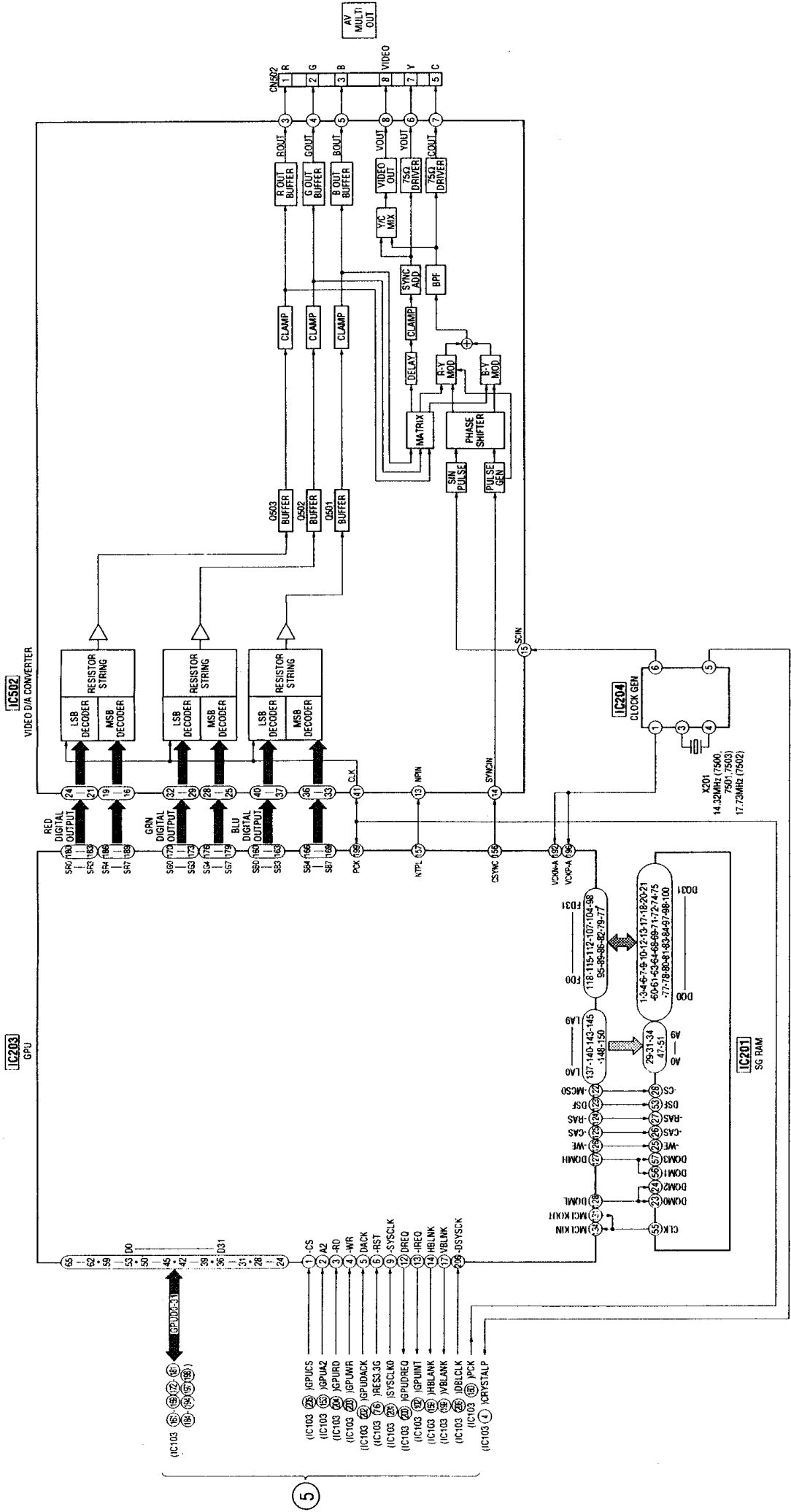


5-1. OVERALL BLOCK DIAGRAM

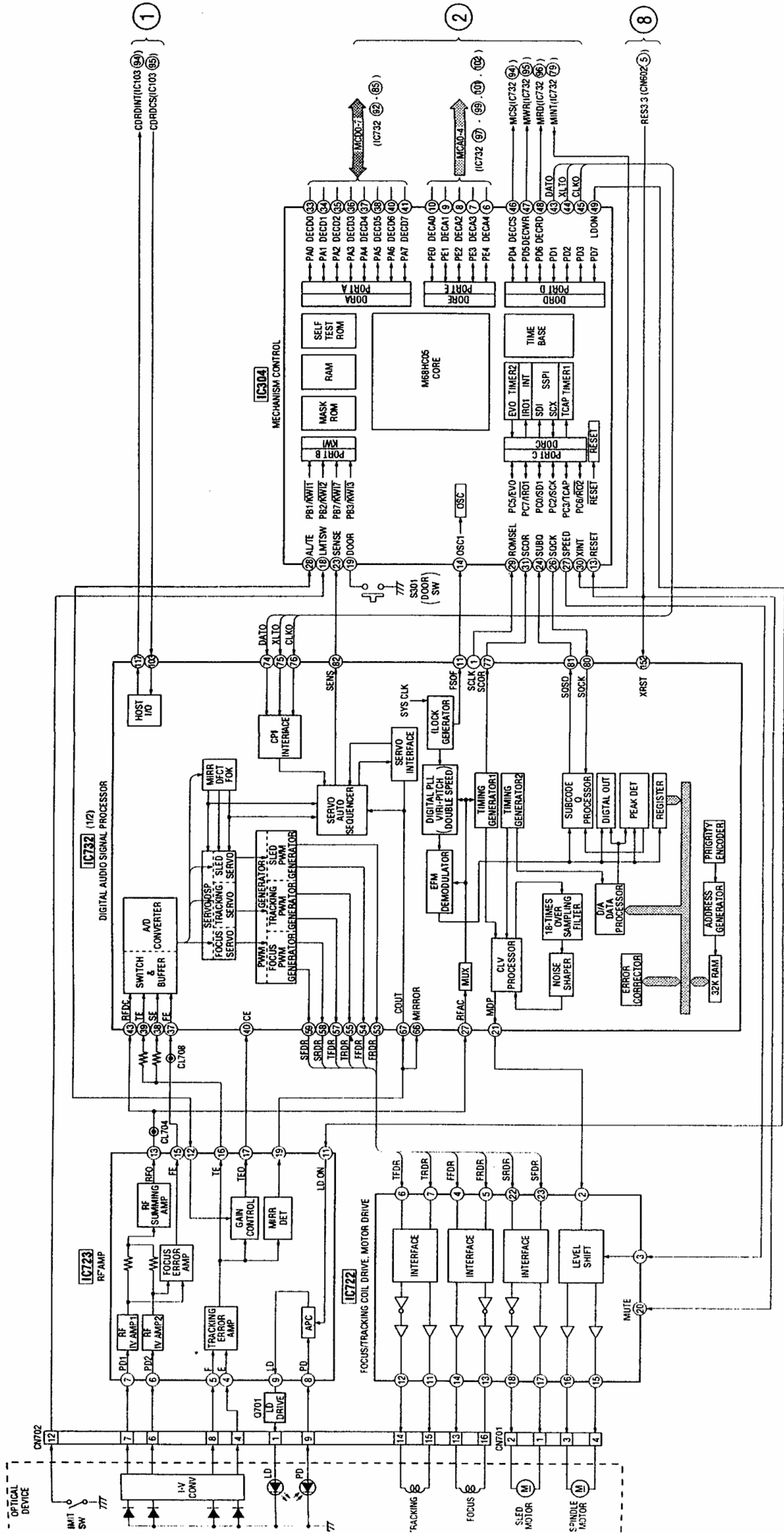
5-2. CPU BLOCK DIAGRAM



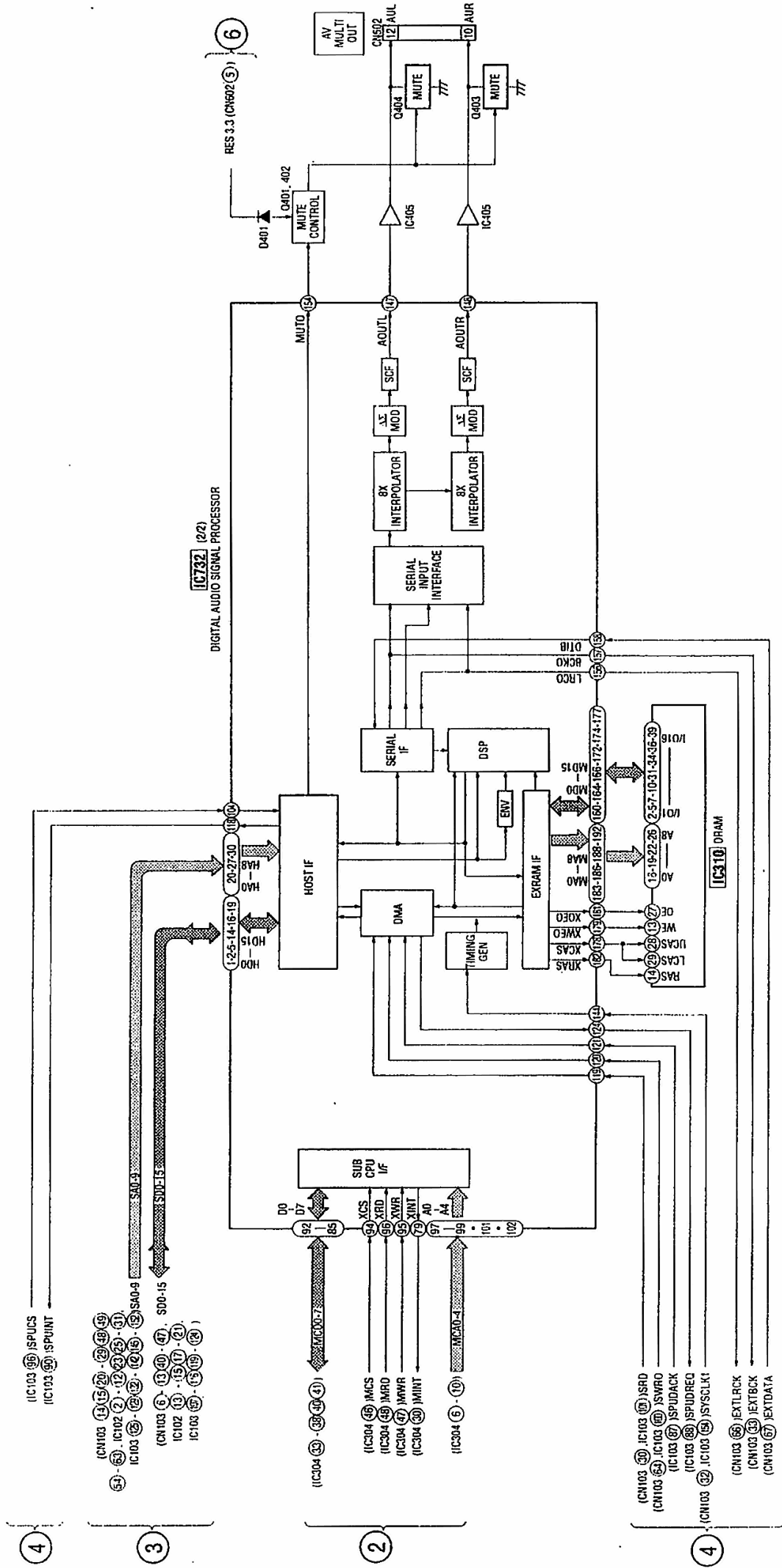
-3- VIDEO BLOCK DIAGRAM



5. SERVO BLOCK DIAGRAM



5-4. AUDIO BLOCK DIAGRAM



4

3

2

4

IC102

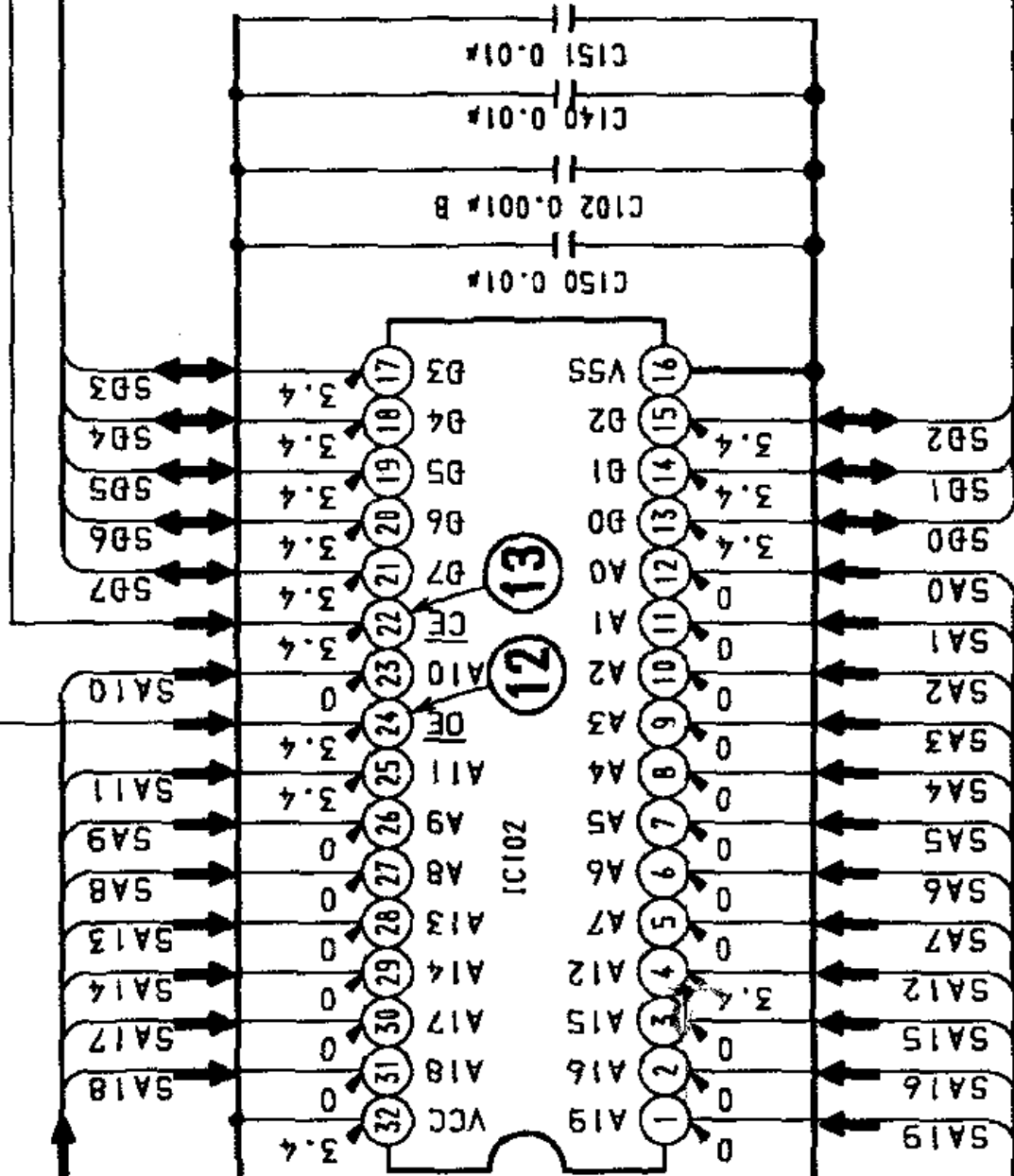
BOOT ROM

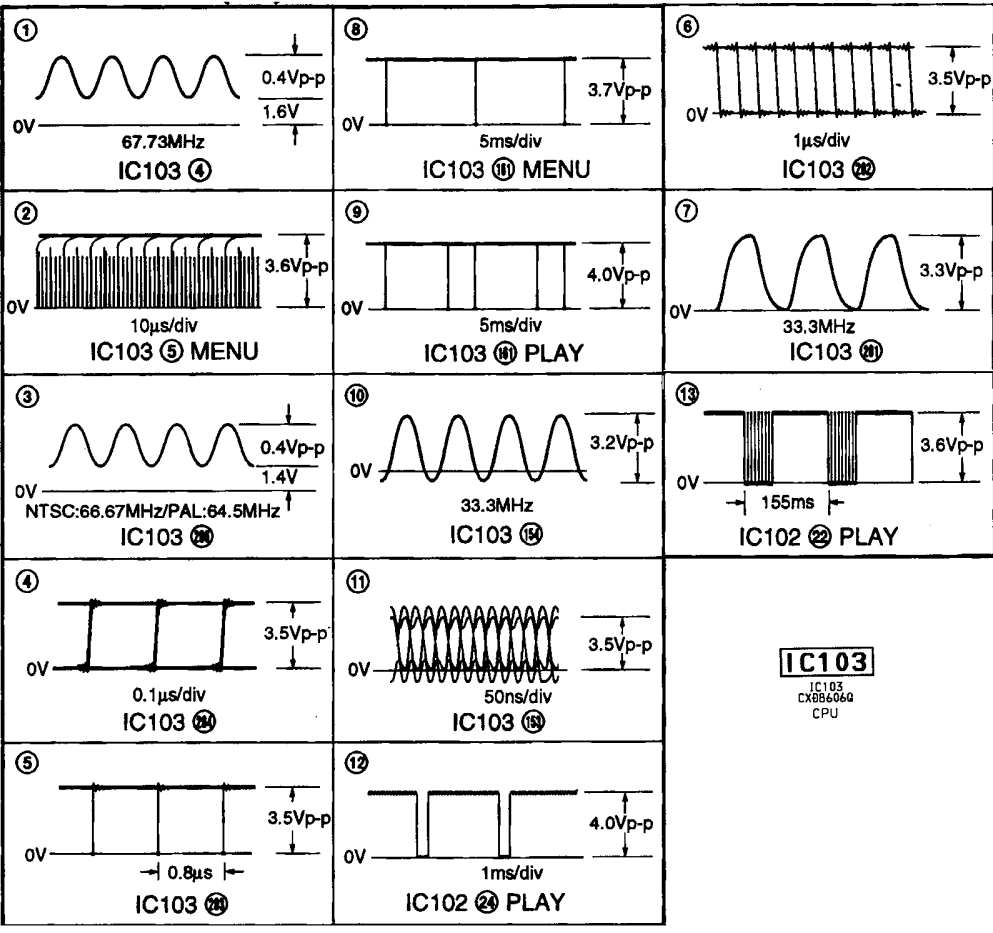
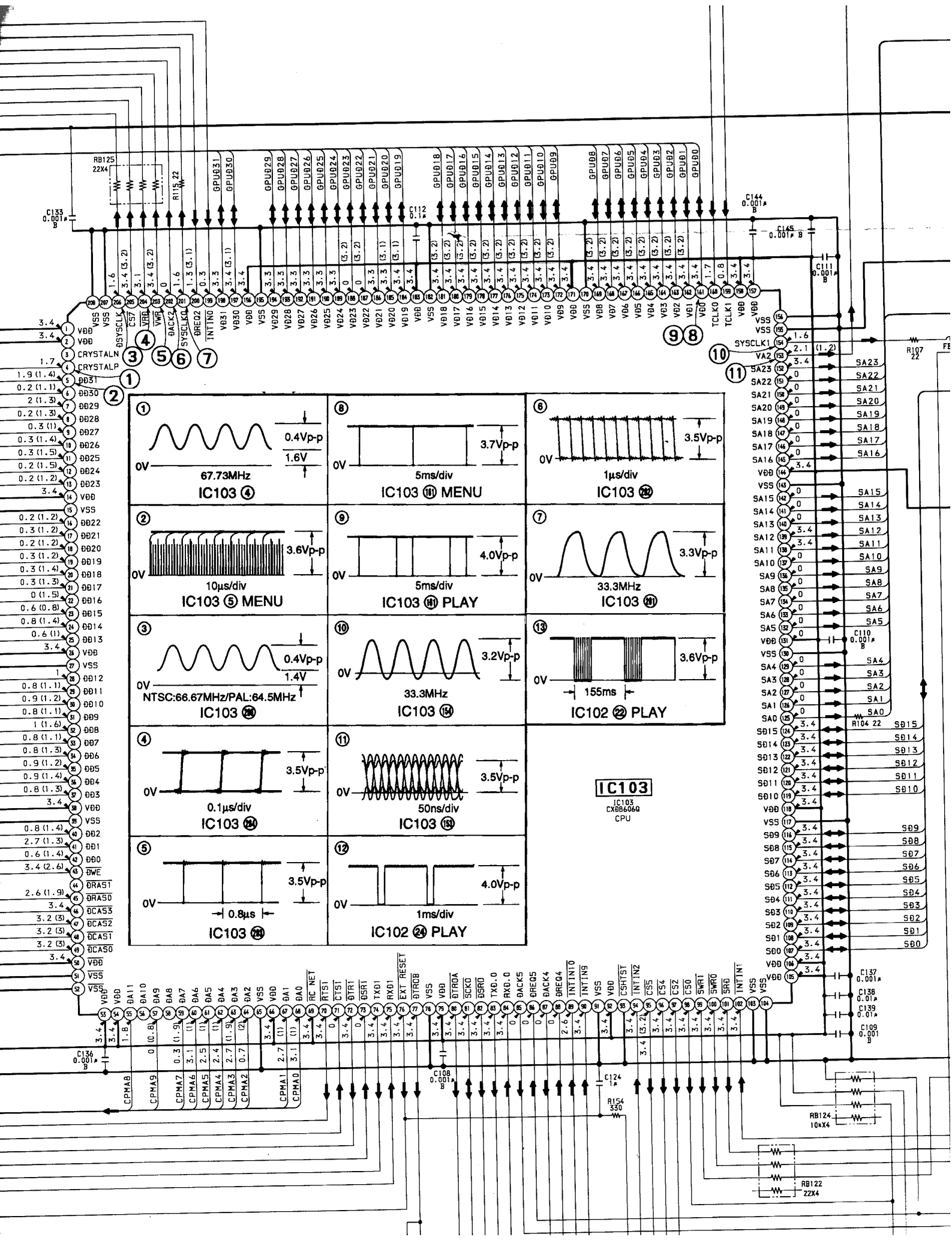
IC102

KM23V40008G-15-KF5314J-1T 07500

KM23V40008G-15-KF5316J-1T 07501, 7503D

MSM534031E-106S-KPR2 07502





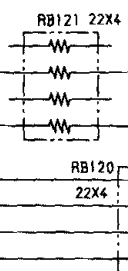
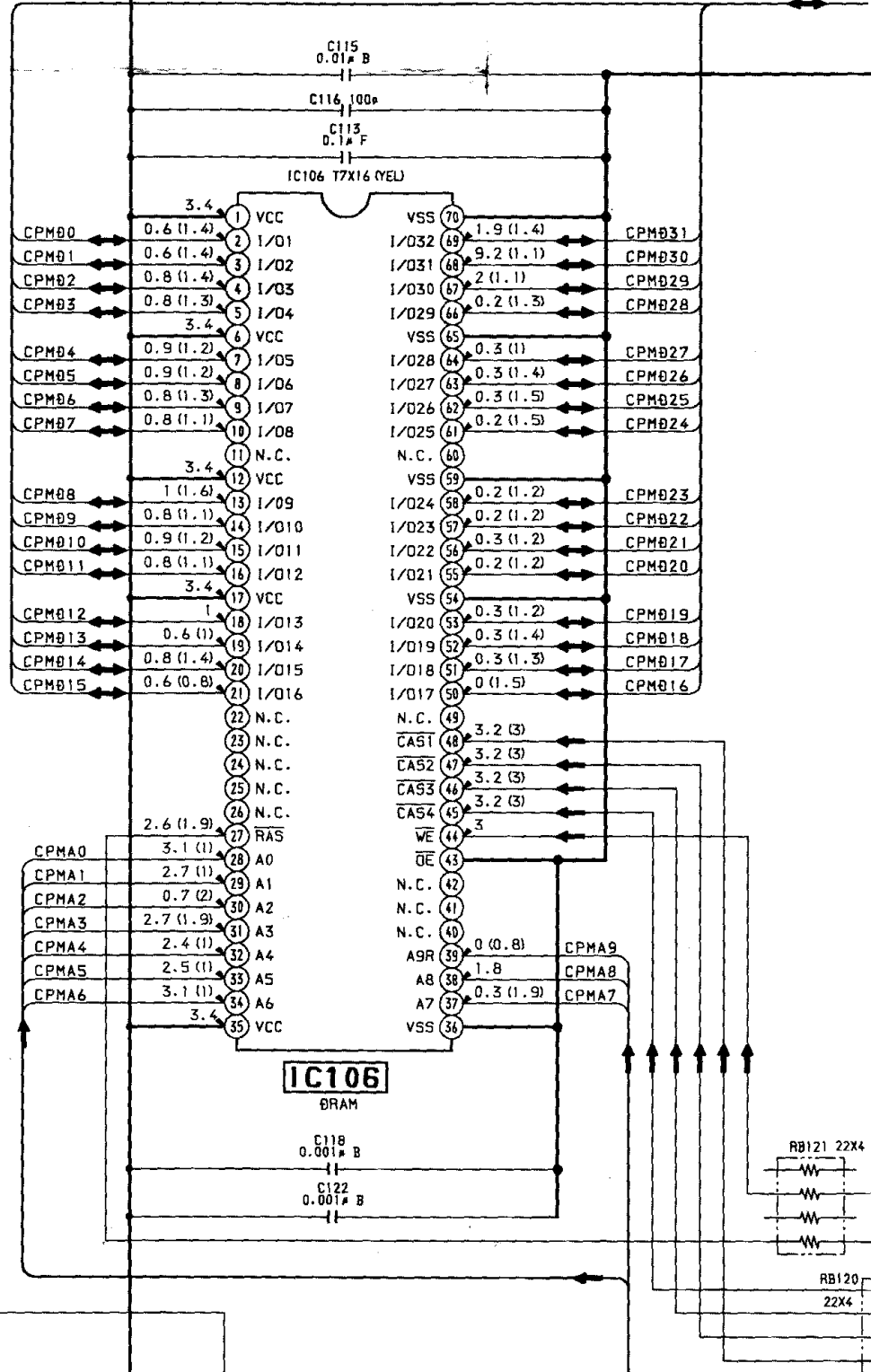
IC103
CX68606Q
CPU

IC203 (206) (-BSYSCK) ← BBLCLK

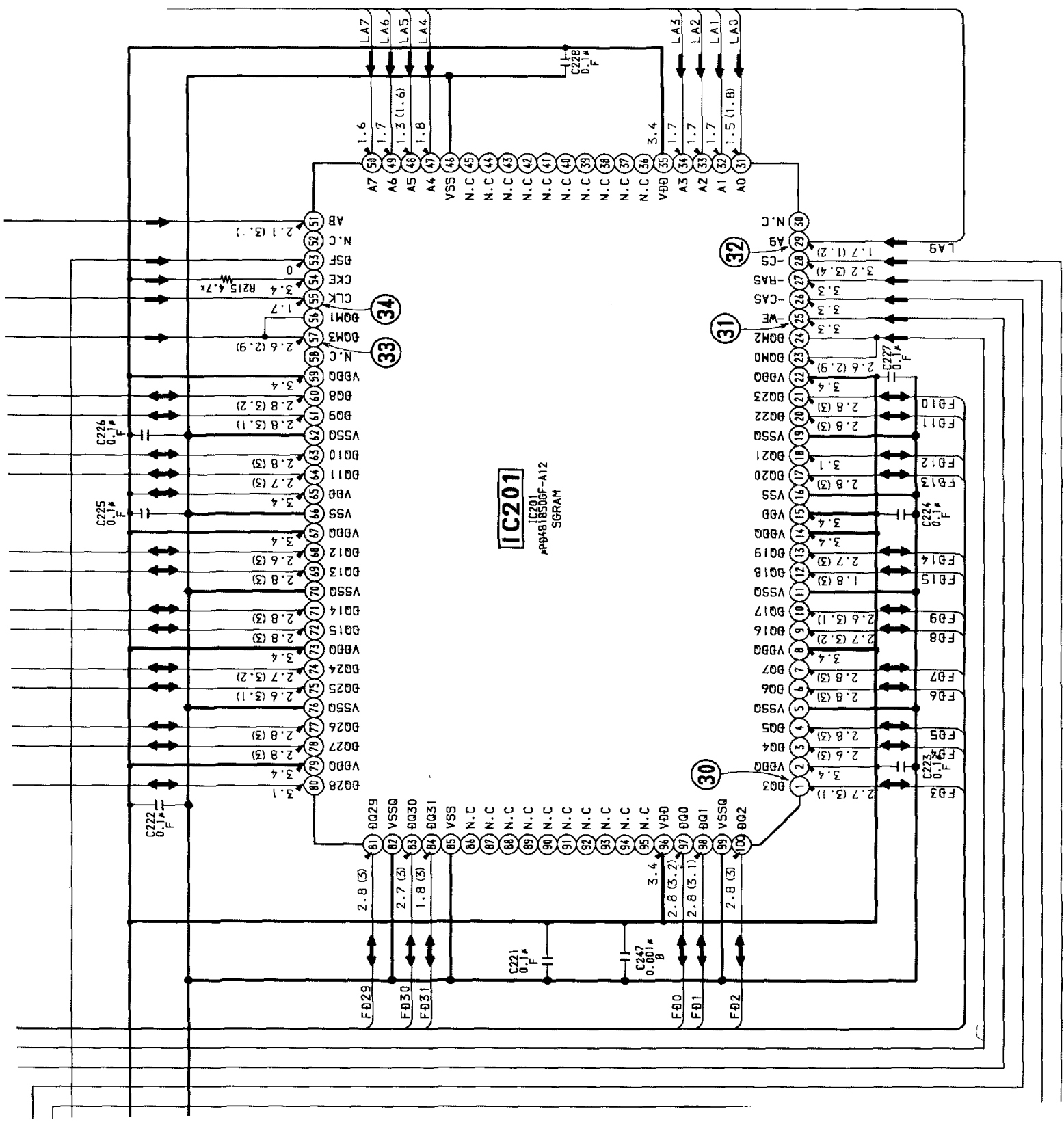
IC204 (5) → CPUCLK

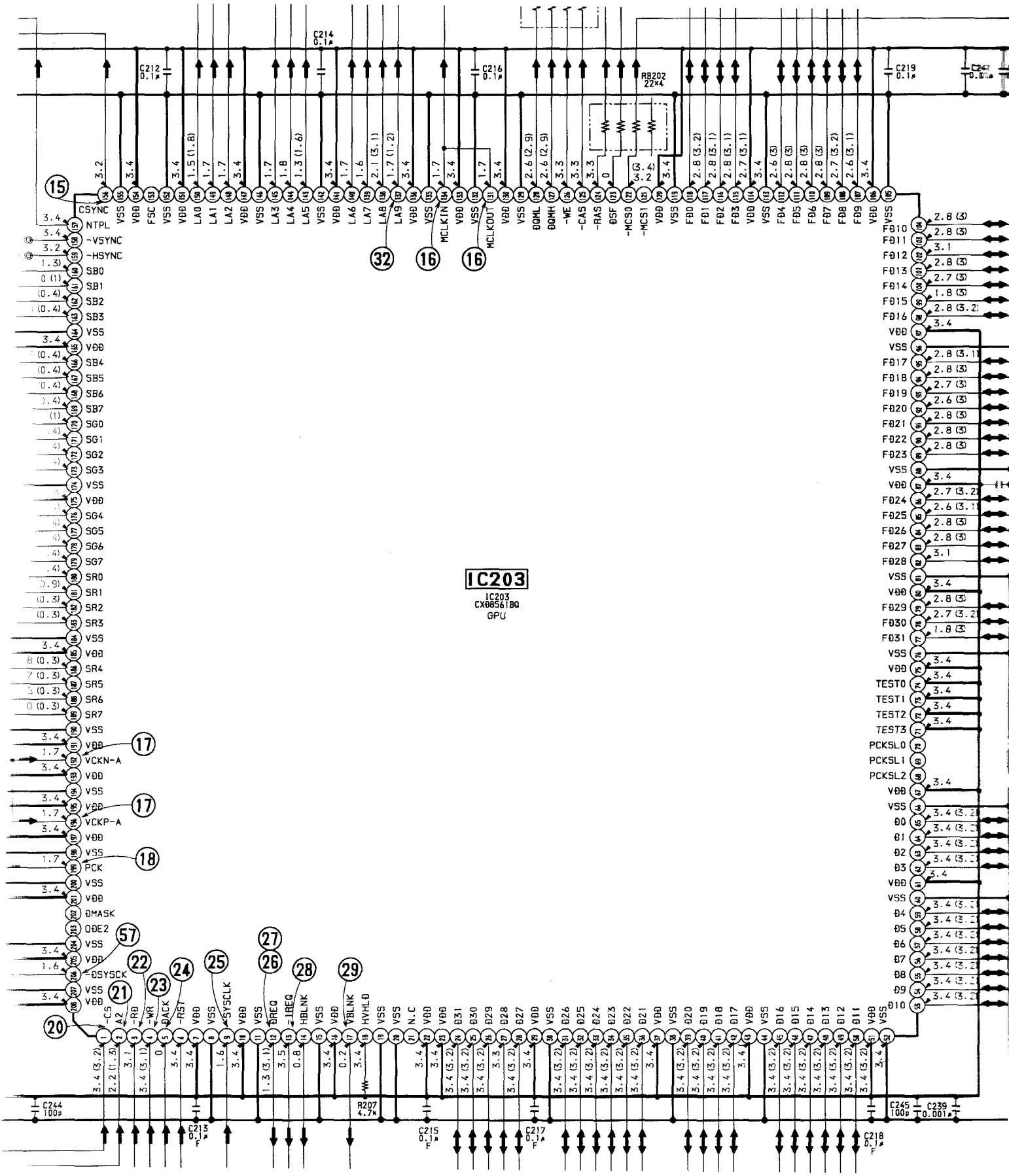
- IC203 (45) (00) ↔ GPU00 ↔ GPU00
- IC203 (44) (01) ↔ GPU01 ↔ GPU01
- IC203 (43) (02) ↔ GPU02 ↔ GPU02
- IC203 (42) (03) ↔ GPU03 ↔ GPU03
- IC203 (59) (04) ↔ GPU04 ↔ GPU04
- IC203 (58) (05) ↔ GPU05 ↔ GPU05
- IC203 (57) (06) ↔ GPU06 ↔ GPU06
- IC203 (56) (07) ↔ GPU07 ↔ GPU07
- IC203 (55) (08) ↔ GPU08 ↔ GPU08
- IC203 (54) (09) ↔ GPU09 ↔ GPU09
- IC203 (53) (10) ↔ GPU10 ↔ GPU10
- IC203 (50) (11) ↔ GPU11 ↔ GPU11
- IC203 (49) (12) ↔ GPU12 ↔ GPU12
- IC203 (48) (13) ↔ GPU13 ↔ GPU13
- IC203 (47) (14) ↔ GPU14 ↔ GPU14
- IC203 (46) (15) ↔ GPU15 ↔ GPU15
- IC203 (45) (16) ↔ GPU16 ↔ GPU16
- IC203 (42) (17) ↔ GPU17 ↔ GPU17
- IC203 (41) (18) ↔ GPU18 ↔ GPU18
- IC203 (40) (19) ↔ GPU19 ↔ GPU19
- IC203 (39) (20) ↔ GPU20 ↔ GPU20
- IC203 (36) (21) ↔ GPU21 ↔ GPU21
- IC203 (35) (22) ↔ GPU22 ↔ GPU22
- IC203 (34) (23) ↔ GPU23 ↔ GPU23
- IC203 (33) (24) ↔ GPU24 ↔ GPU24
- IC203 (32) (25) ↔ GPU25 ↔ GPU25
- IC203 (31) (26) ↔ GPU26 ↔ GPU26
- IC203 (28) (27) ↔ GPU27 ↔ GPU27
- IC203 (27) (28) ↔ GPU28 ↔ GPU28
- IC203 (26) (29) ↔ GPU29 ↔ GPU29
- IC203 (25) (30) ↔ GPU30 ↔ GPU30
- IC203 (24) (31) ↔ GPU31 ↔ GPU31

IC203 (6) (-RST) ← RES3.3G



→ 016 +3.3V





IC203
 CX8856180
 GPU

15

32

16

16

17

17

18

22

23

24

21

25

27

26

28

29

2.8 (3)

2.8 (3)

3.1

2.8 (3)

2.7 (3)

1.8 (3)

2.8 (3, 2)

3.4

VSS

2.8 (3, 1)

2.8 (3)

2.7 (3)

2.8 (3)

2.8 (3)

2.8 (3)

3.1

VSS

3.4

2.8 (3)

2.7 (3, 2)

2.8 (3)

2.8 (3)

2.8 (3)

3.4

VSS

3.4

3.4

3.4

3.4

3.4

3.4

3.4

3.4

3.4

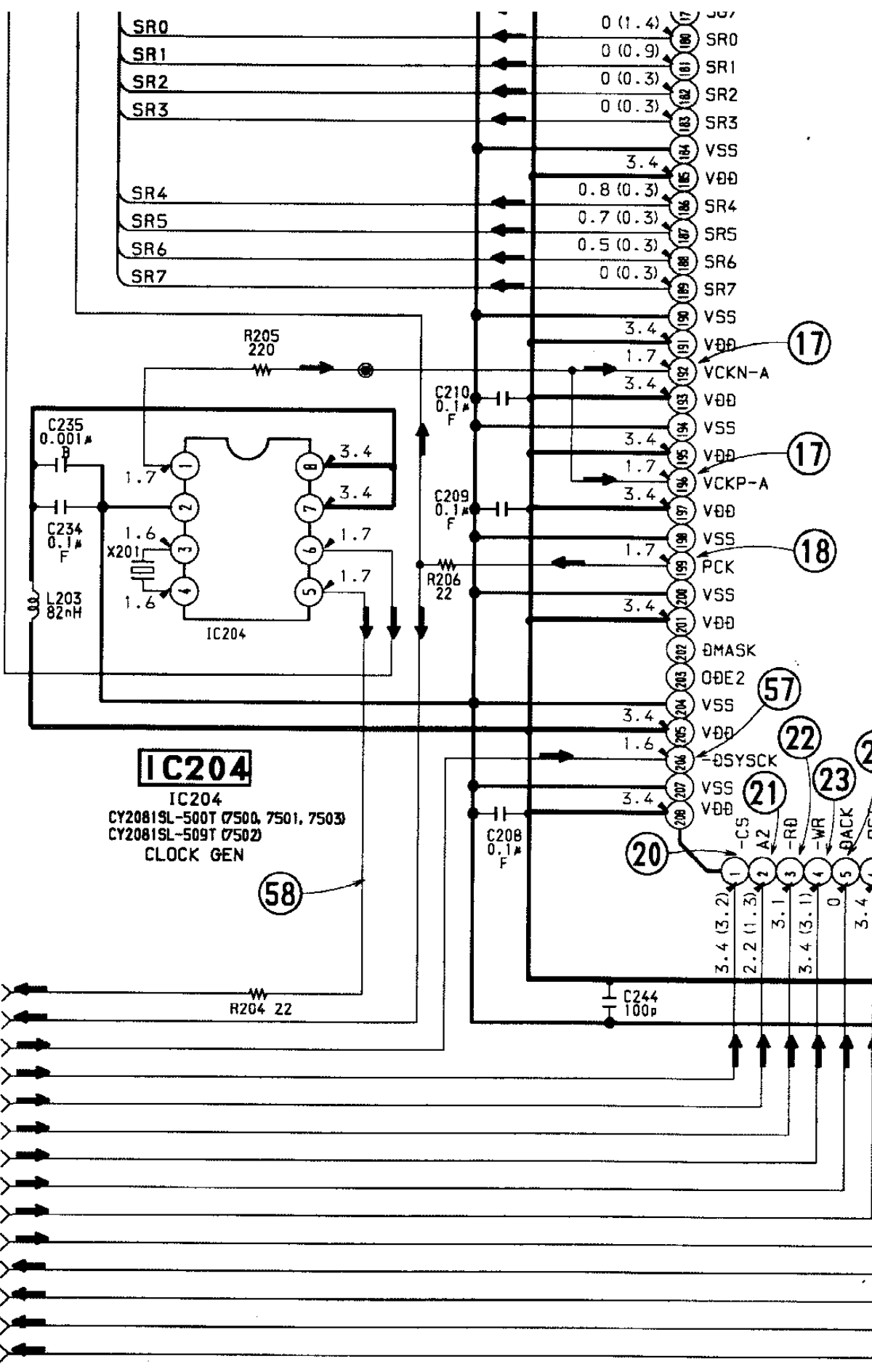
3.4

3.4

3.4

3.4

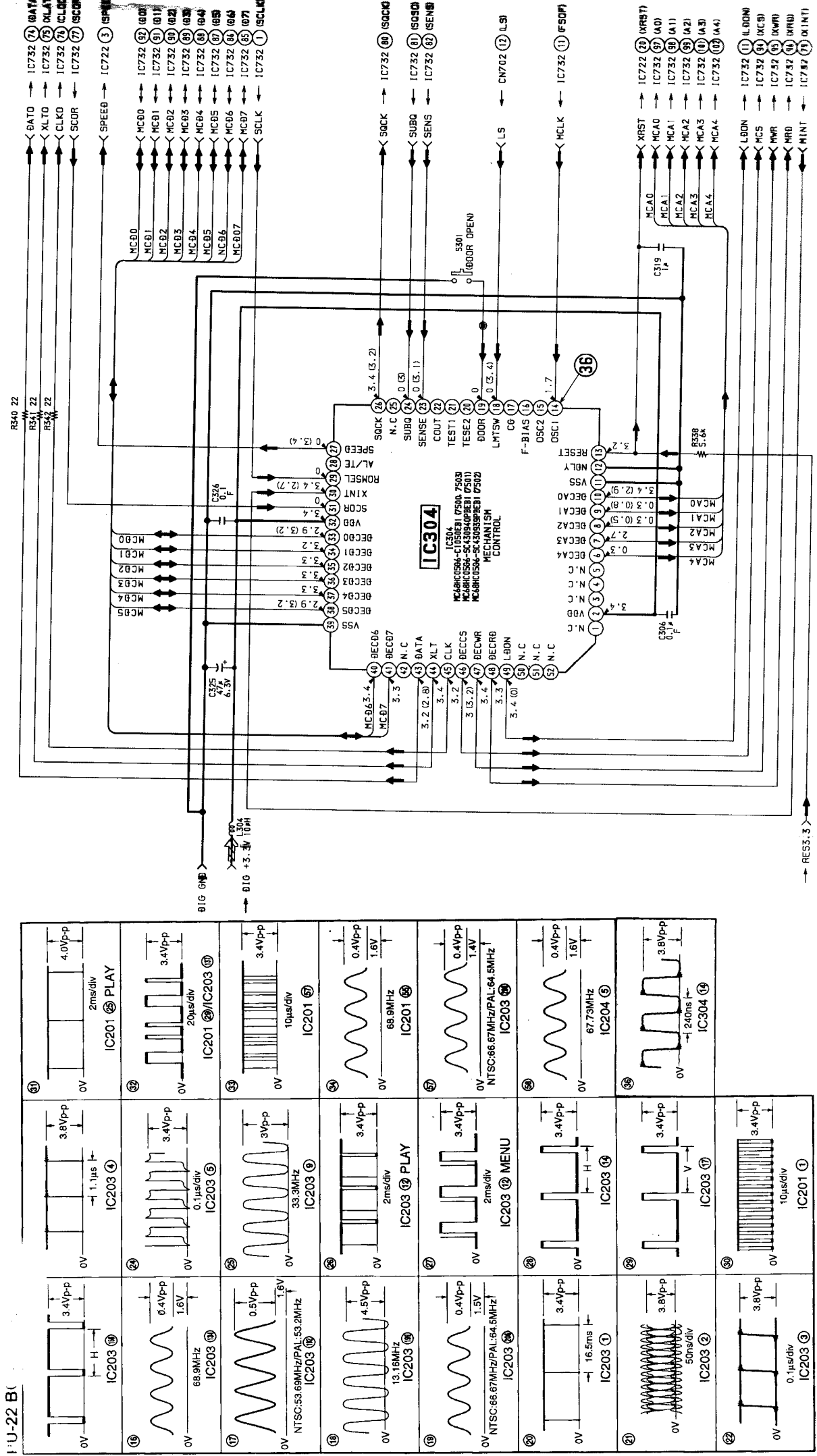
X201
14.32MHz (7500, 7501, 7503)
17.73MHz (7502)

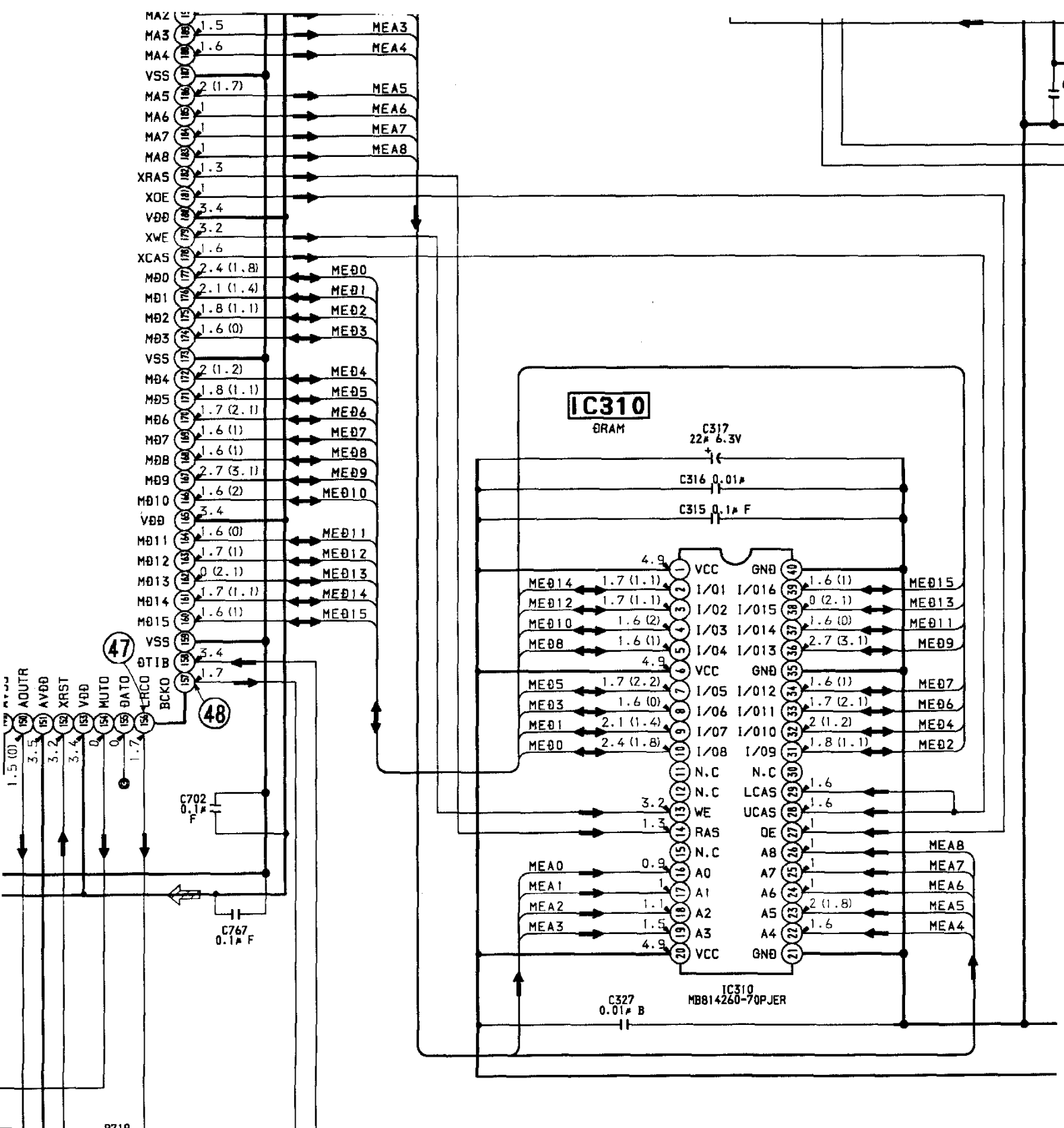


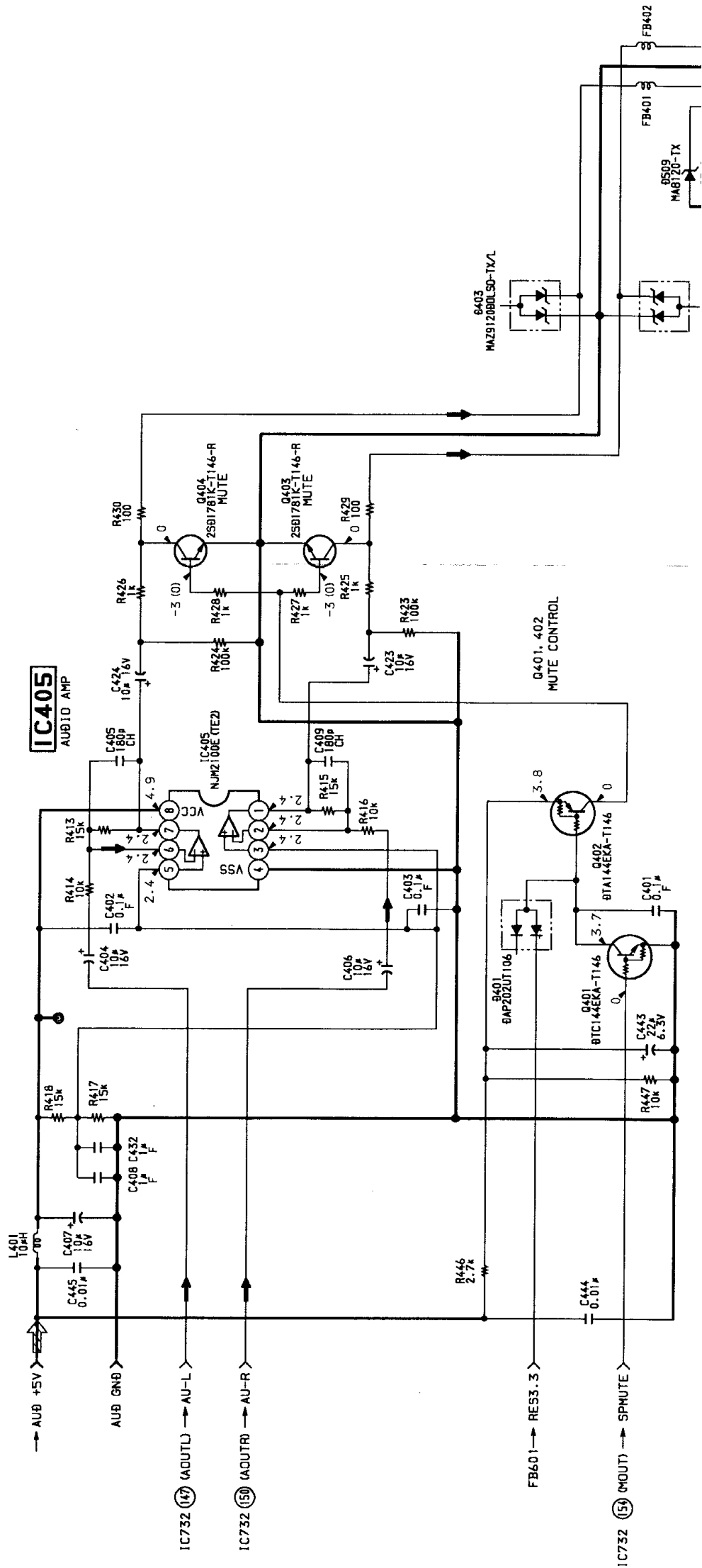
6-5. SCHEMATIC DIAGRAM (PU-22 (-11-12-21-22-32) BOARD (3/5))

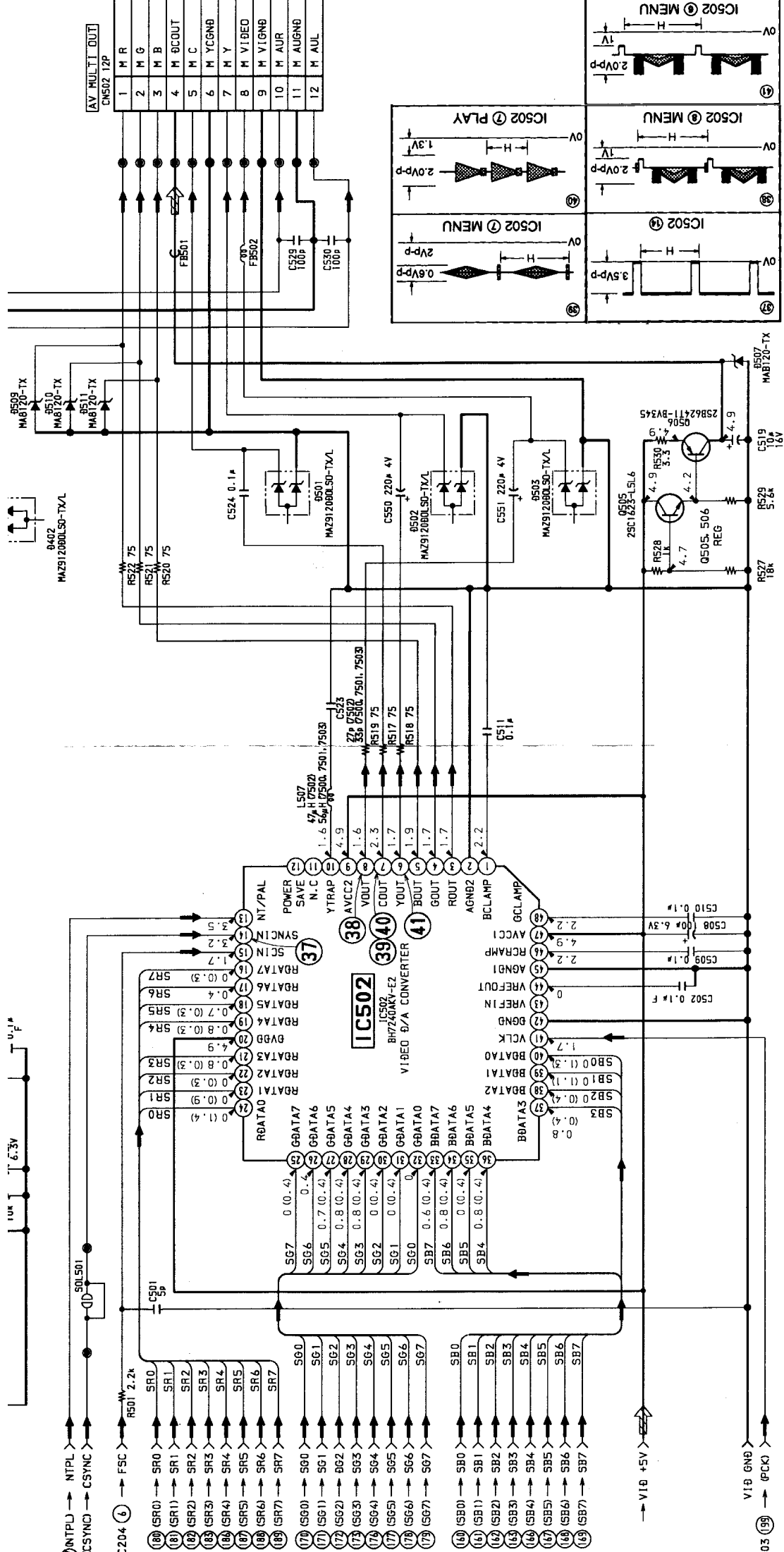
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

PU-22 BOARD (3/5)



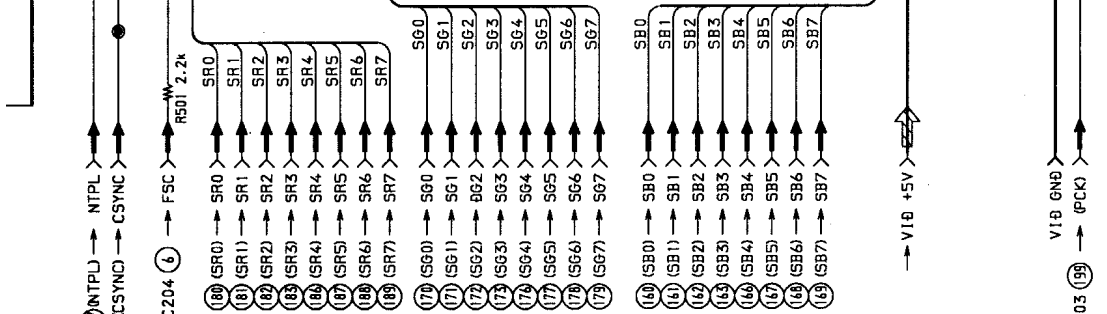
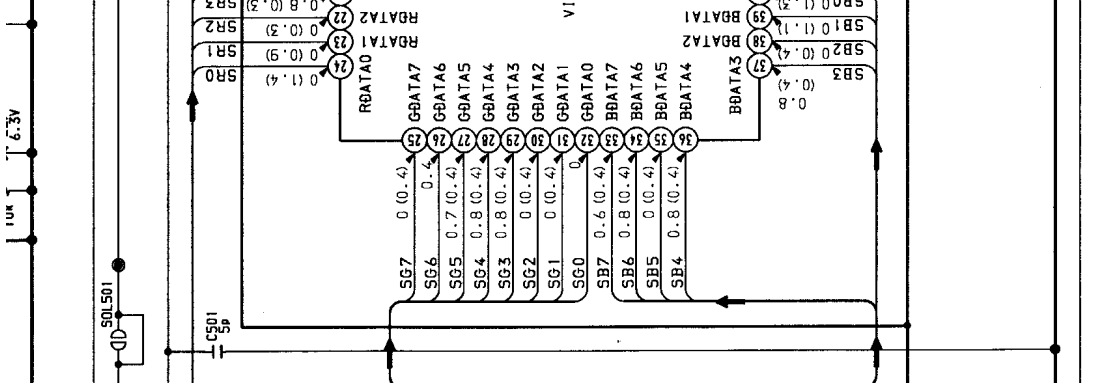
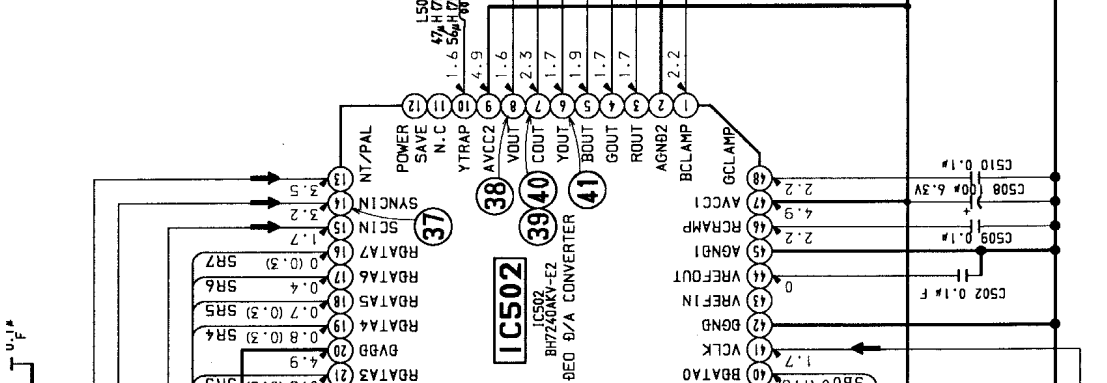
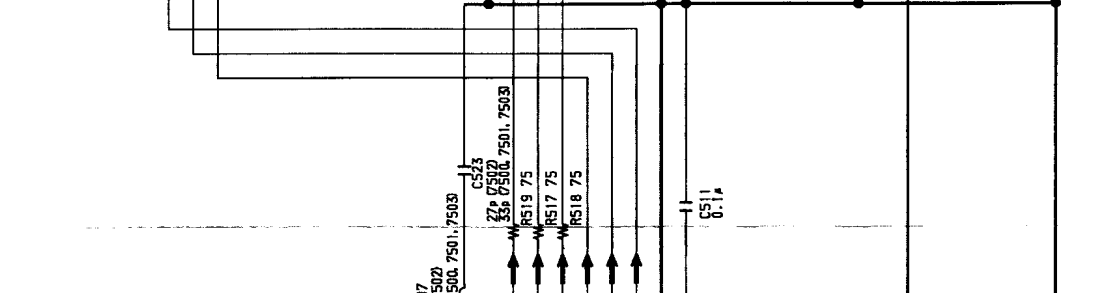
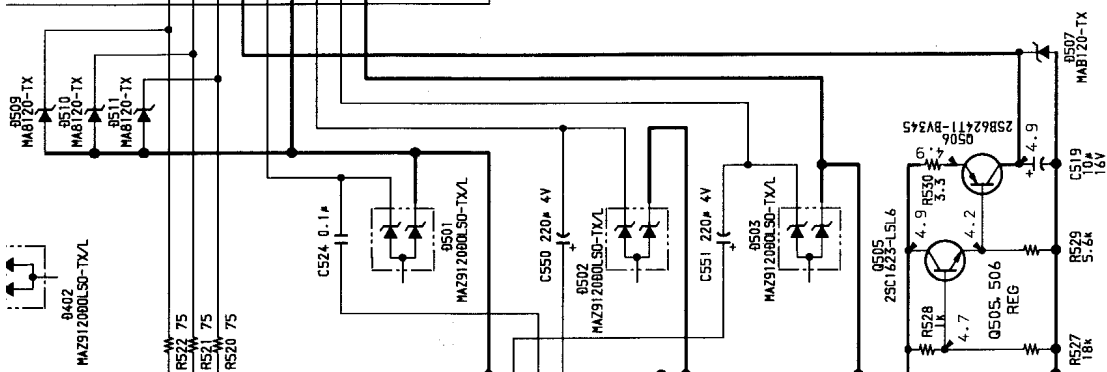
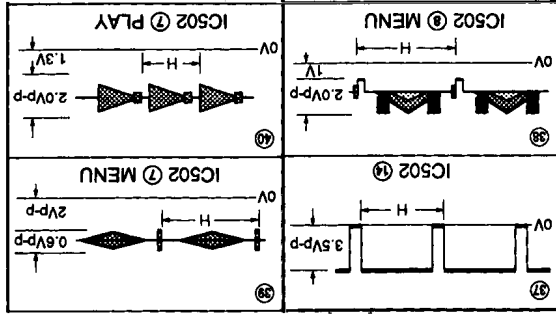


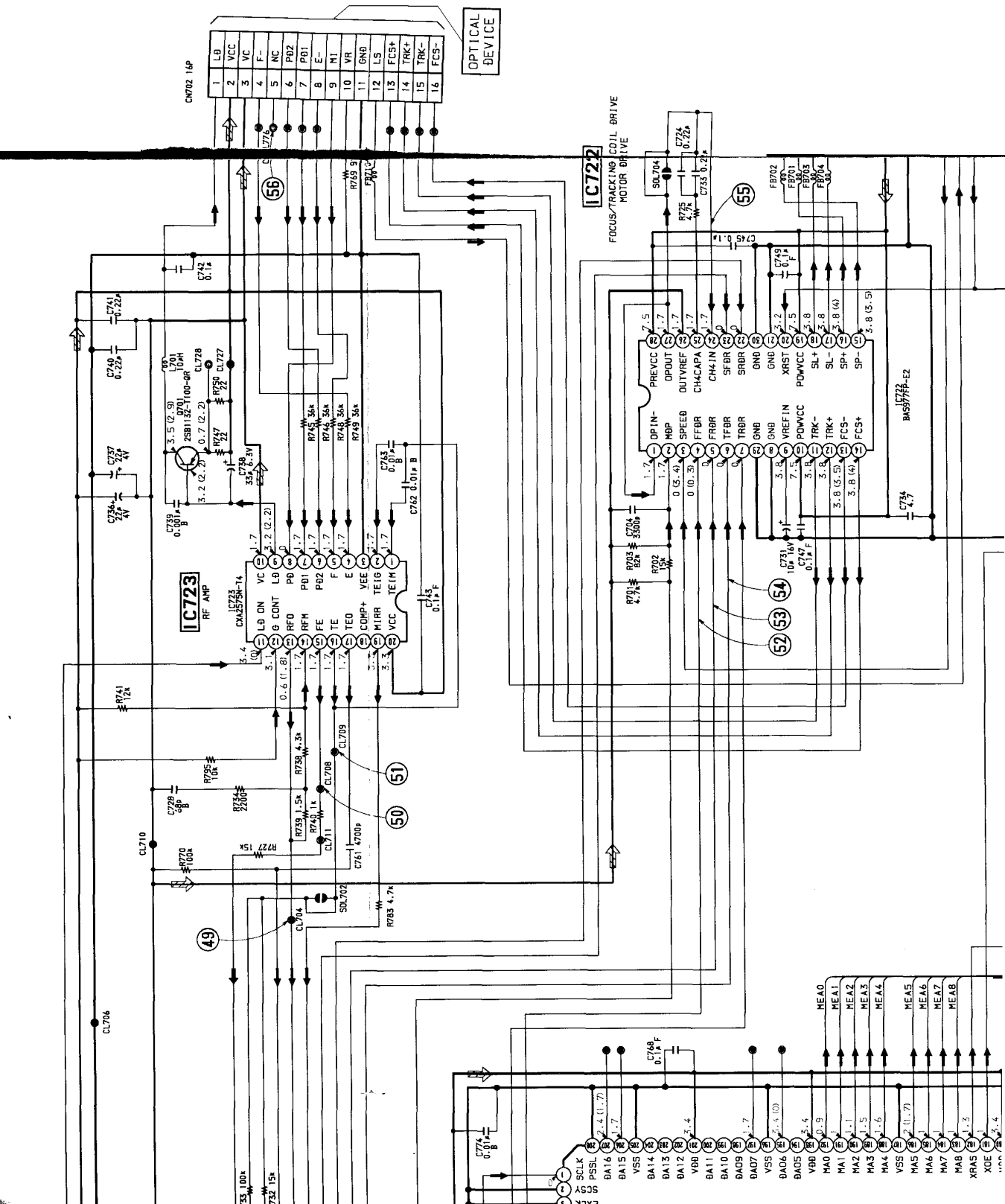
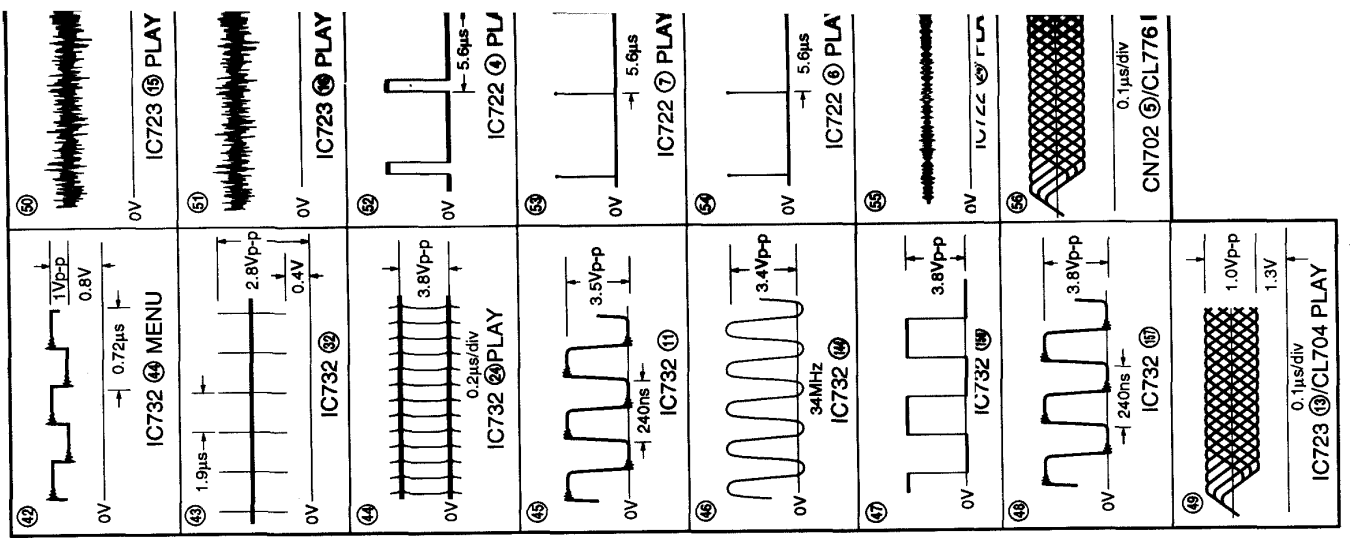




AV MULTI OUT
CS502 12P

1	M R
2	M G
3	M B
4	M BCOUT
5	M C
6	M YCGBD
7	M Y
8	M VIDEO
9	M YIGNB
10	M AUR
11	M AUGNB
12	M AUL





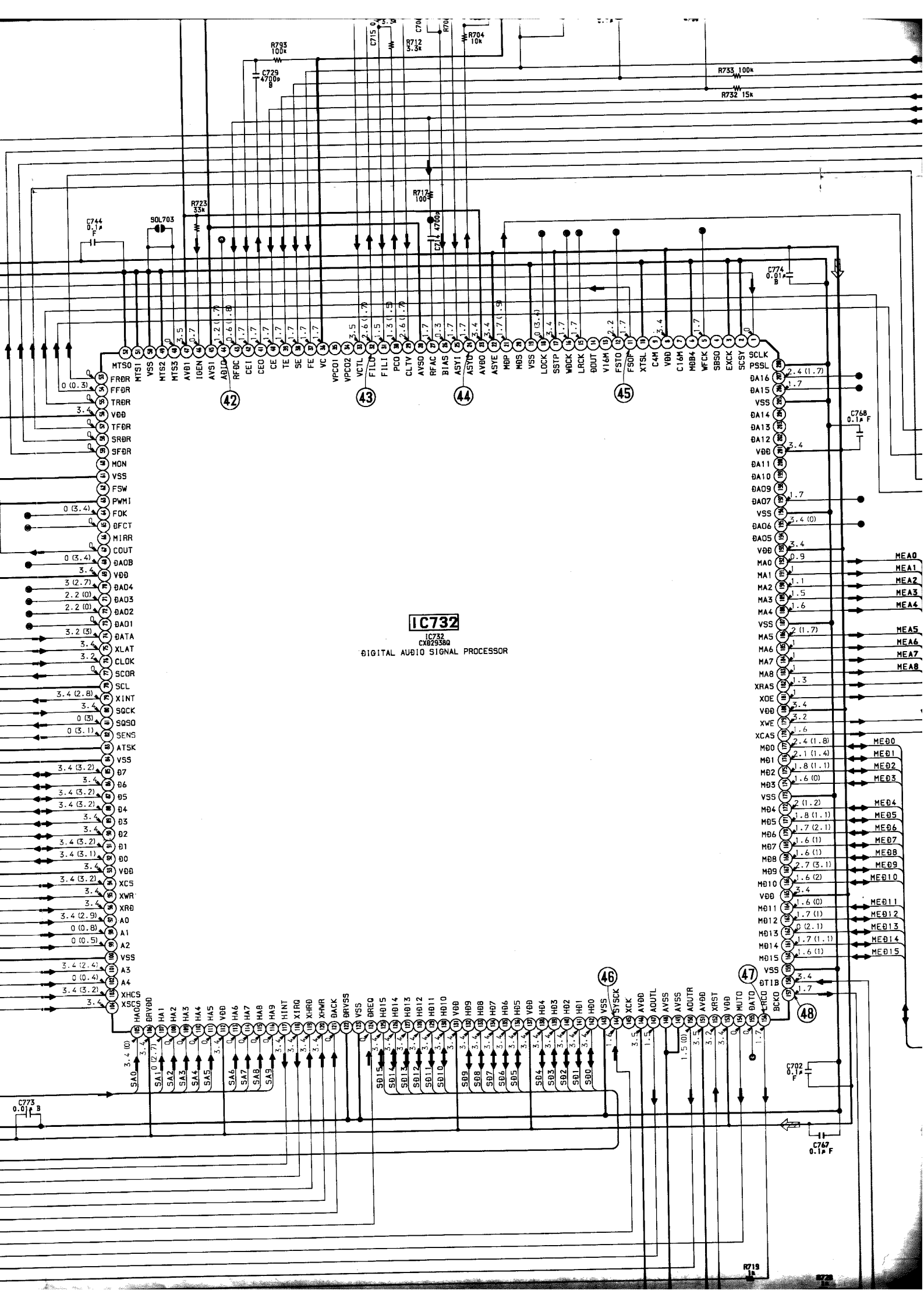
CM702 16P

1	LB
2	VCC
3	VC
4	F-
5	NC
6	PBD1
7	PBD2
8	E-
9	MI
10	VR
11	GND
12	LS
13	FCS+
14	TRK+
15	TRK-
16	FCS-

OPTICAL DEVICE

IC722
FOCUS/TRACKING COIL DRIVE
MOTOR DRIVE

BA5977P-E2



IC732

CX829380
DIGITAL AUDIO SIGNAL PROCESSOR

42

43

44

45

46

47

48

MEA0
MEA1
MEA2
MEA3
MEA4
MEA5
MEA6
MEA7
MEA8

ME00
ME01
ME02
ME03
ME04
ME05
ME06
ME07
ME08
ME09
ME010
ME011
ME012
ME013
ME014
ME015

C702

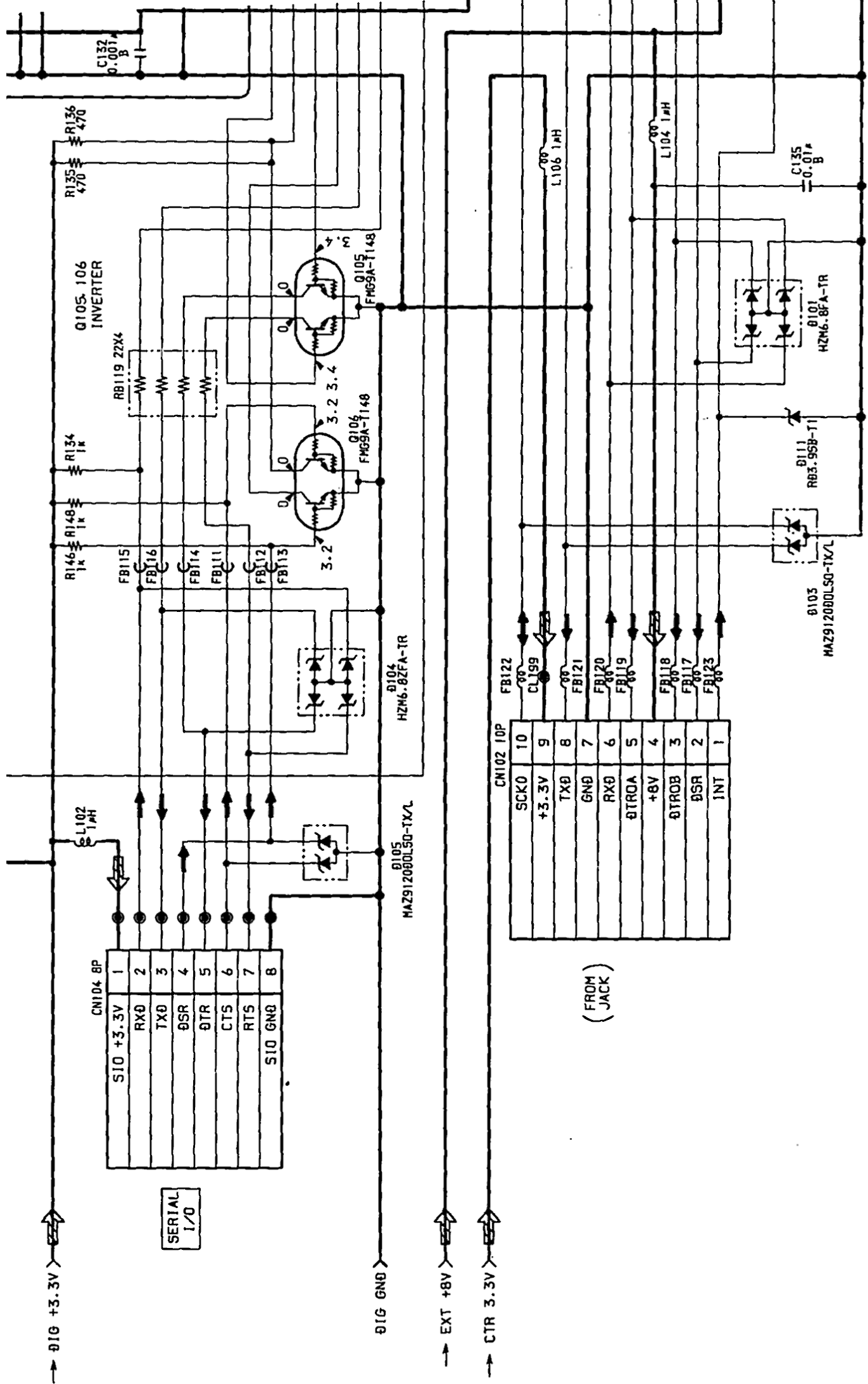
0.1F

C767

0.1F

R719

10



CNI04 8P

SIO +3.3V	1
RX0	2
TX0	3
0SR	4
0TR	5
CTS	6
RTS	7
SIO GND	8

SERIAL I/O

CNI02 10P

SCK0	10
+3.3V	9
TX0	8
GND	7
RX0	6
0TROA	5
+8V	4
0TROB	3
0SR	2
INT	1

(FROM JACK)

0103
HAZ912080LS0-TX/L

0101
HZN6.8FA-TR

Q105
FMG9A-T148

Q104
FMG9A-T148

Q105.106
INVERTER

R135 470
R136 470

R146 1K
R148 1K
R134 1K

RB119 22X4

L102 100

L106 100

L104 100

C135 0.01A

C132 0.001A

0111
R03.95B-T1

0105
HAZ912080LS0-TX/L

010 +3.3V

010 GND

EXT +8V

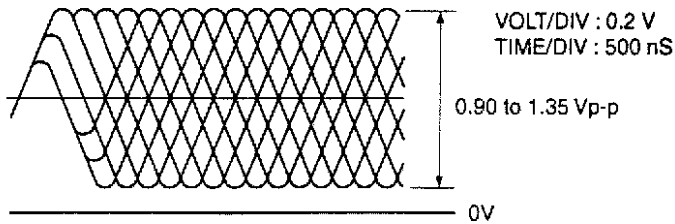
CTR 3.3V

SECTION 3 ADJUSTMENTS

3-1. CHECK SPECIFICATION

RF level 0.90 to 1.35 Vp-p (Check point : Between CL704 (HOT) and CL710 (VC).)

- RF signal waveform (eye pattern)



Use SCD-2700 DISC when measured RF level.
Use the oscilloscope with input impedance more than 10 MΩ.

RF Jitter Below 9.0 nS (Measuring by KJM-6135S JITTER METER.)

Below 27.0 nS (Measuring by KJM-6235S JITTER METER.)

PP level 1.1 ± 0.6 Vp-p (Check point : Between CL776 (HOT) and CL710 (VC).)

Use LPF (fc = 10 kHz)

Tracking level 1.25 ± 0.65 Vp-p (Check point : Between CL709 (HOT) and CL710 (VC).)

Caution. Vc Line (CL710) do not make common use with GND line.

Check Point for PU-22 Board.

