

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

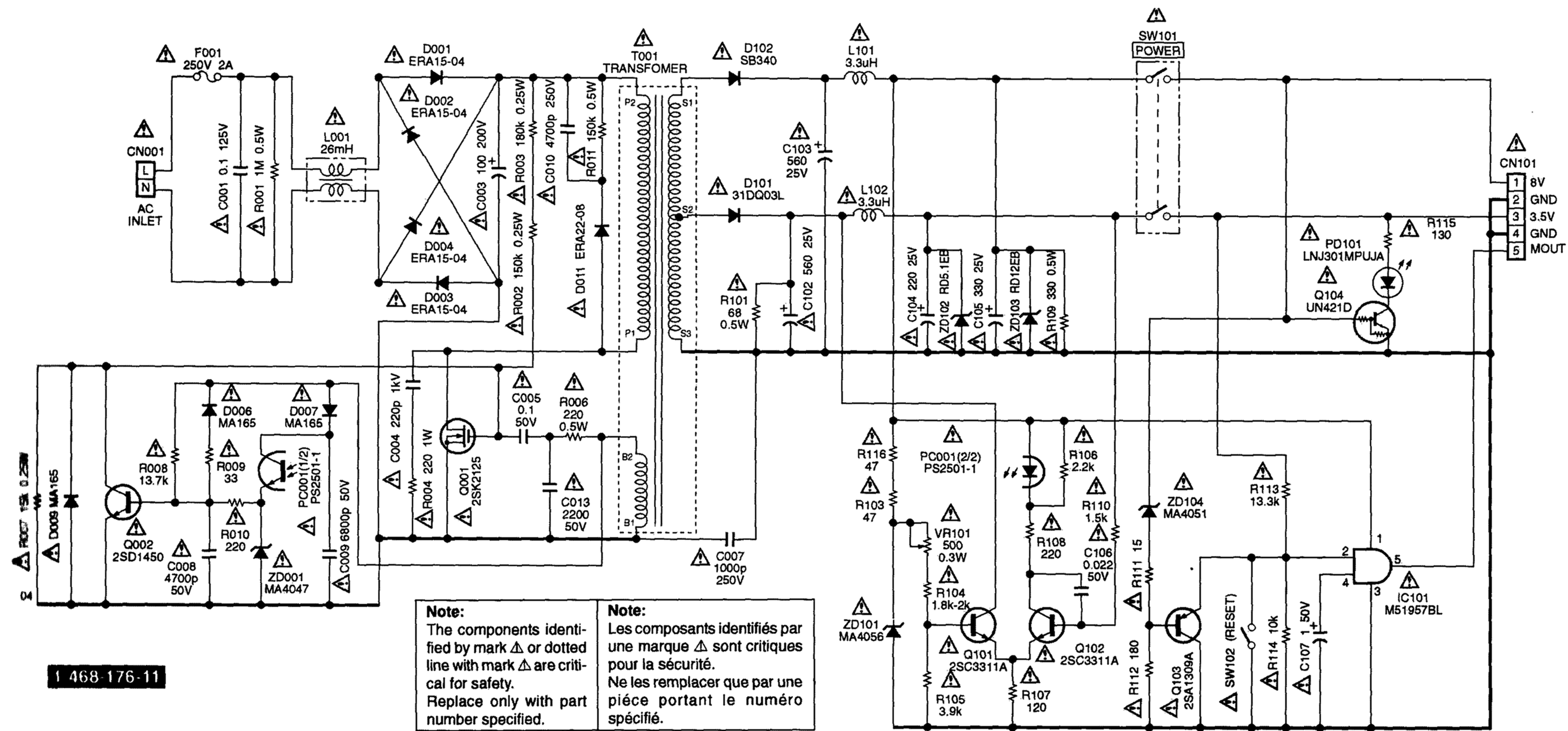
3rd Edition



Reproduction prohibited

Registered No.

PlayStation

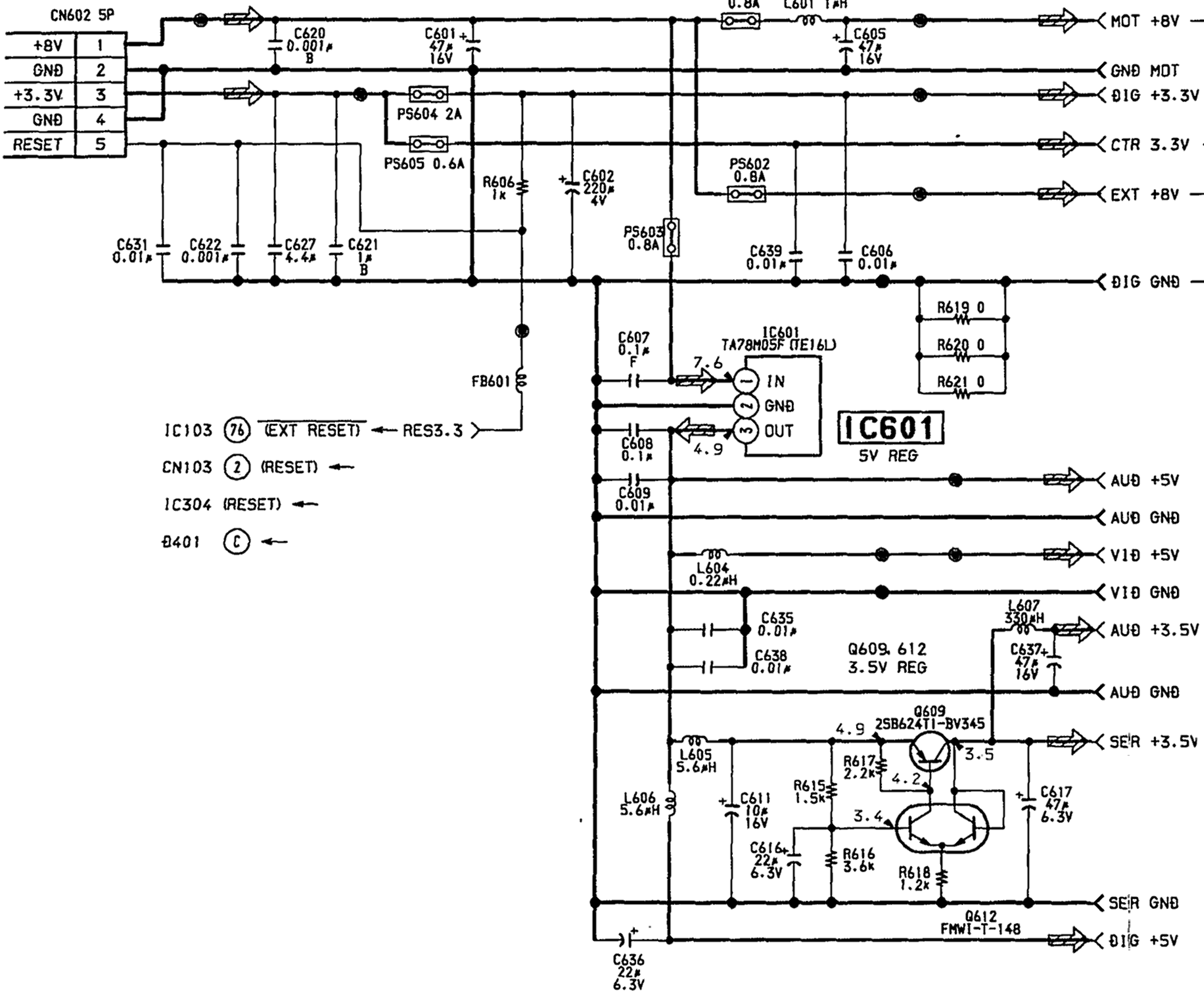


1 468-176-11

6-9. PRINTED WIRING BOARD (POWER BLOCK (1-468-176-11))

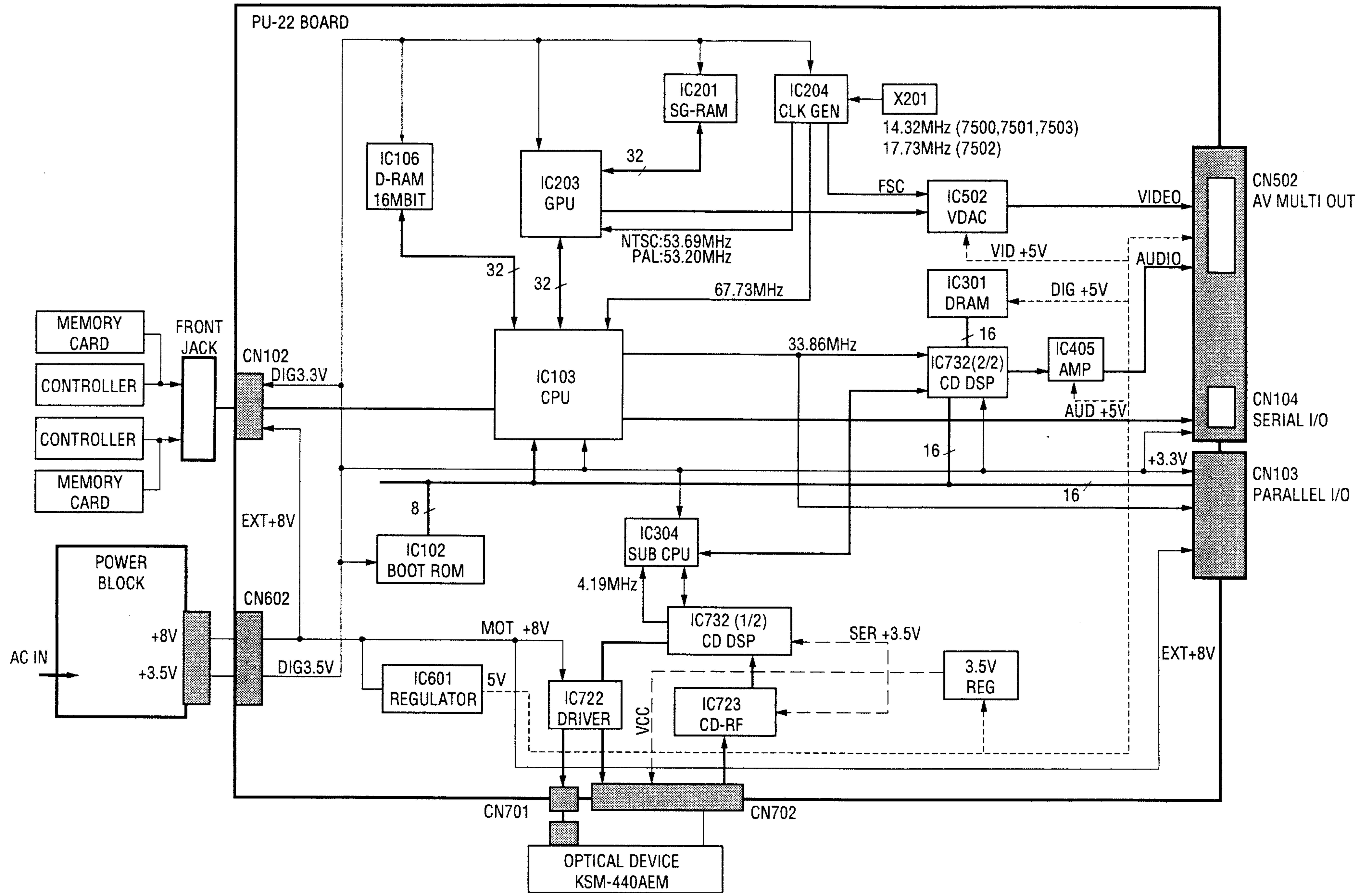
POWER BLOCK (SCPH-7500)

JARD (4/5)

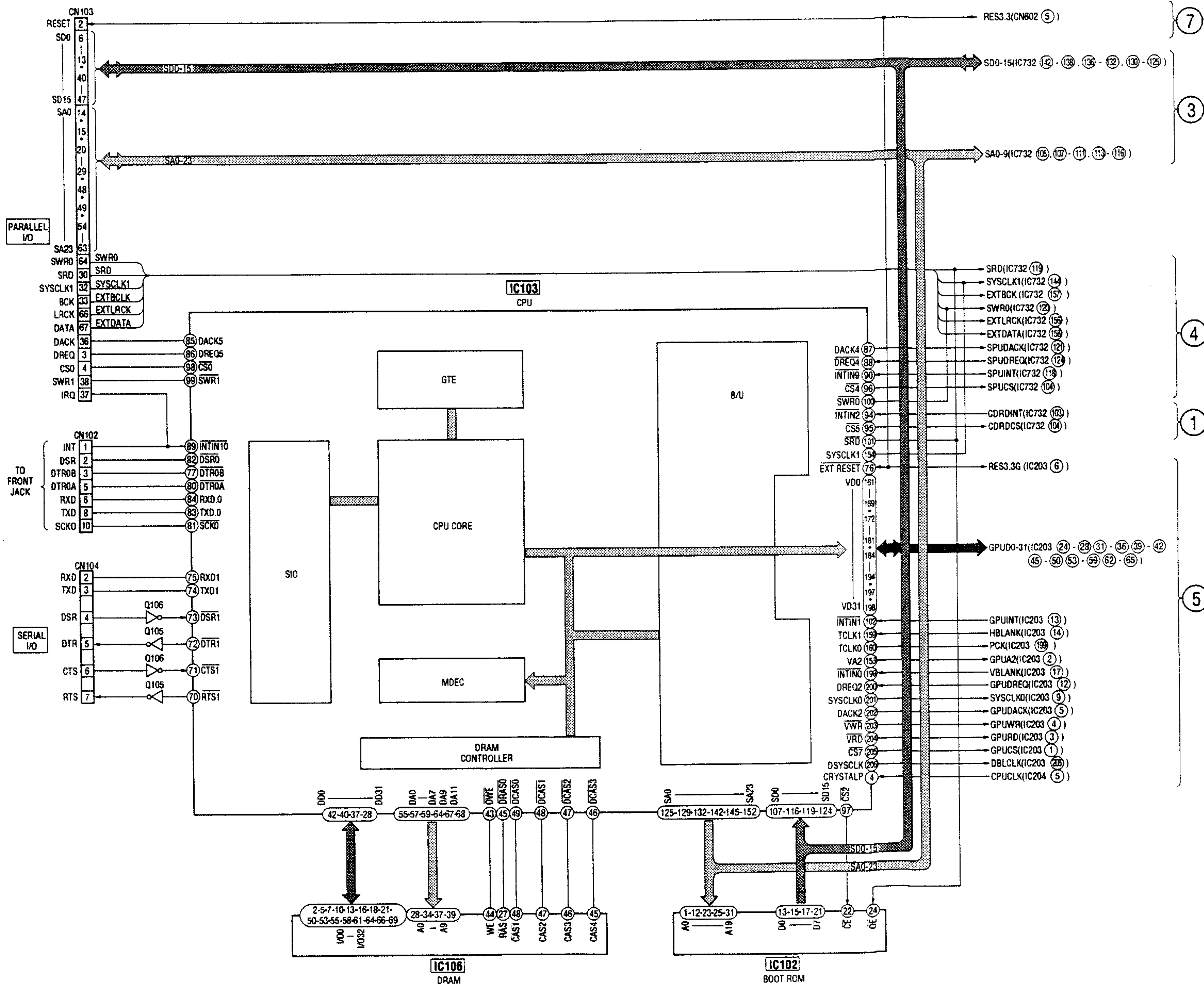


SECTION 5
BLOCK DIAGRAMS

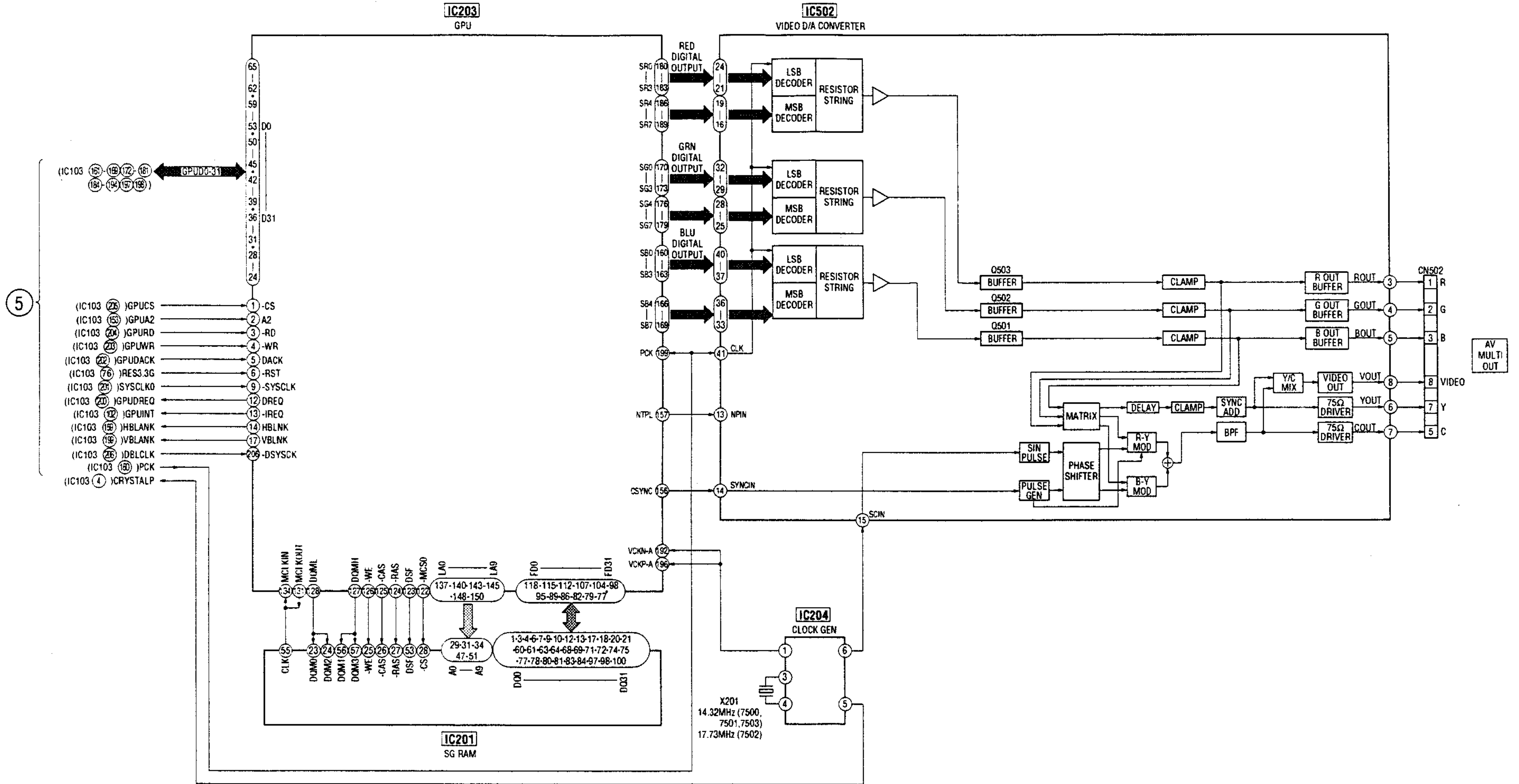
5-1. OVERALL BLOCK DIAGRAM



5-2. CPU BLOCK DIAGRAM

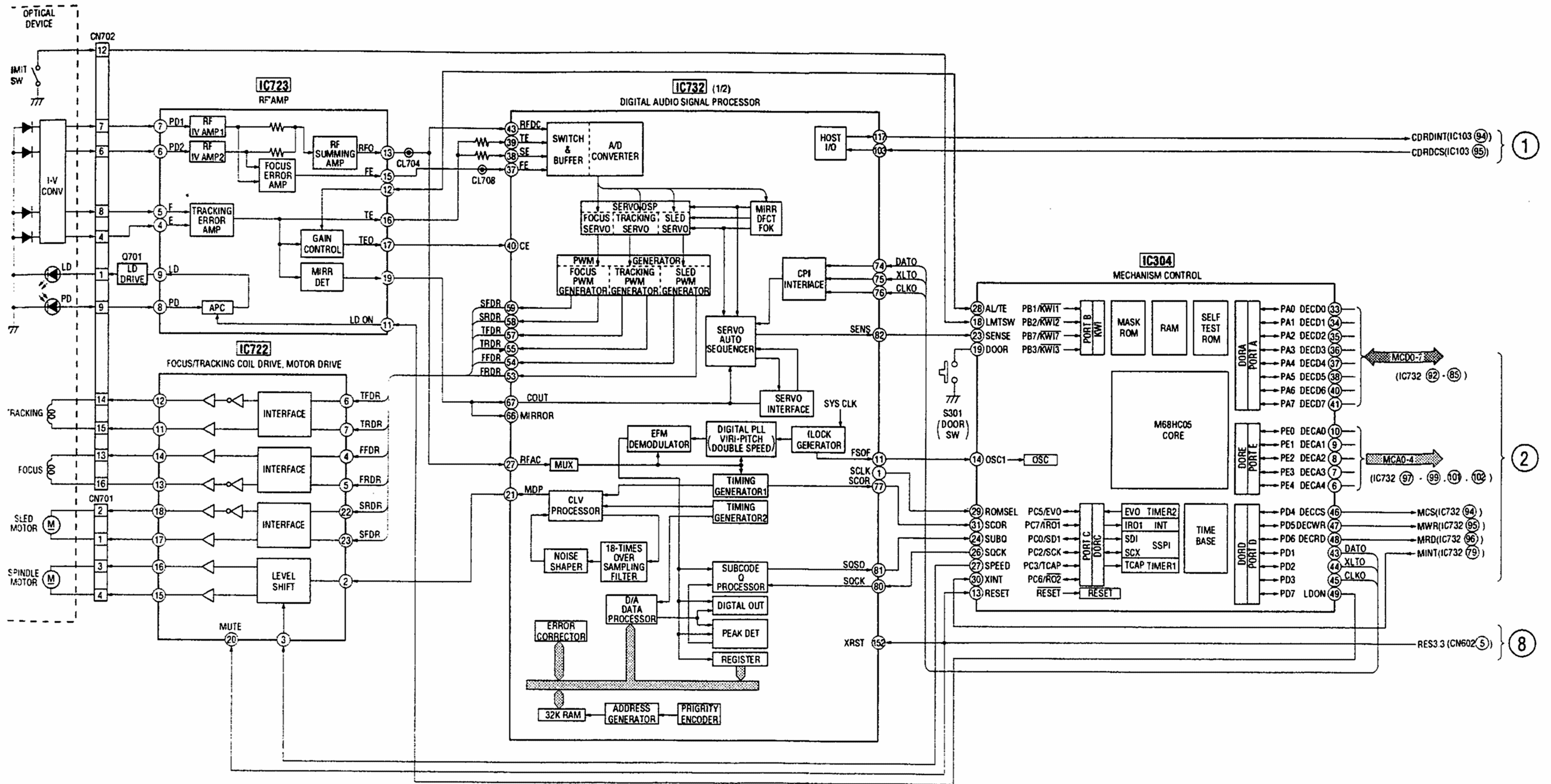


-3. VIDEO BLOCK DIAGRAM

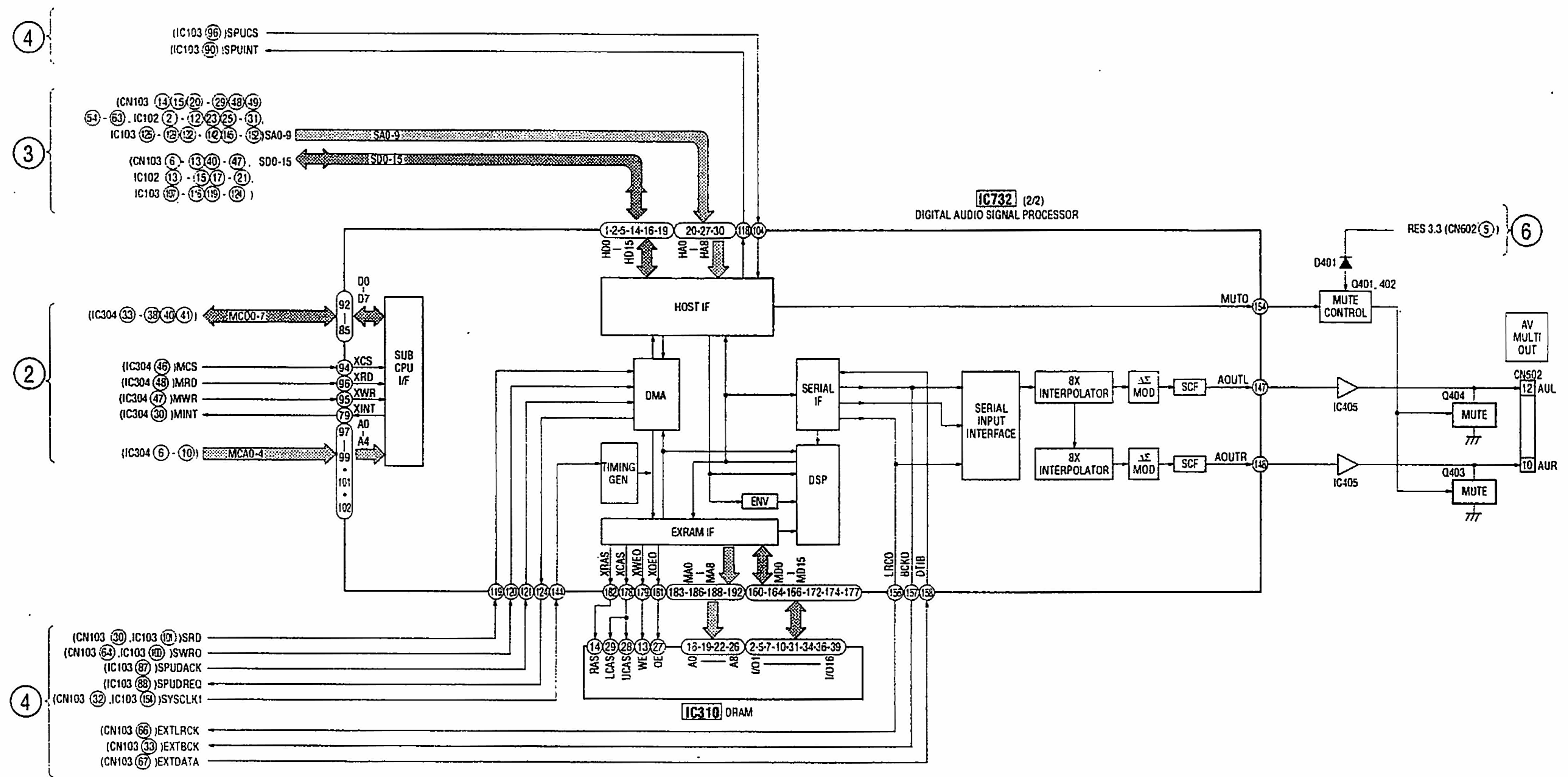


5

5. SERVO BLOCK DIAGRAM



5-4. AUDIO BLOCK DIAGRAM

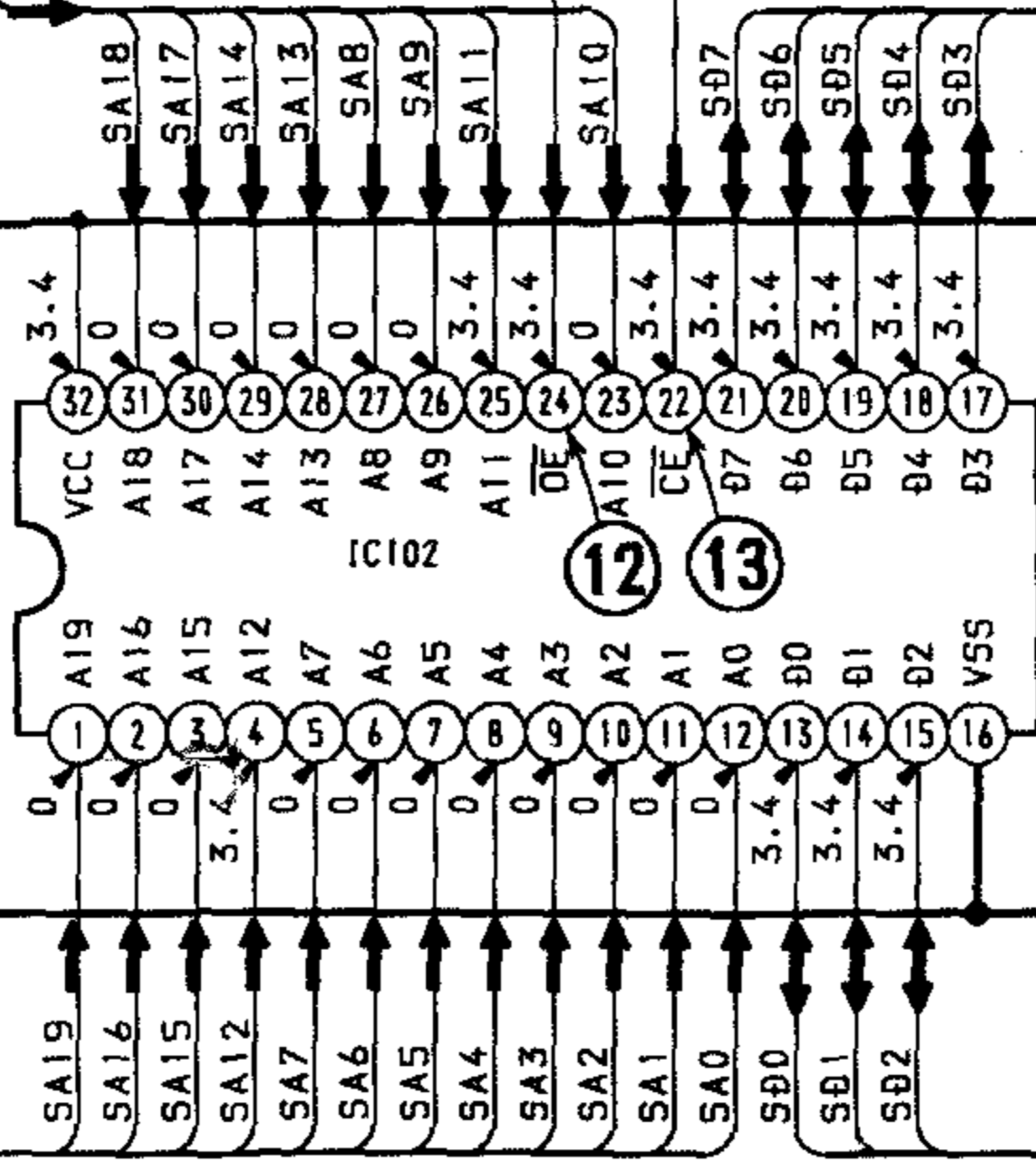


IC102

BOOT ROM

IC102

KM23V40000G-15-KF5314J-1T (7500)
KM23V40000G-15-KF5316J-1T (7501, 7503)
MSM534031E-10GS-KPR2 (7502)



C150 0.01μ

C102 0.001μ B

C140 0.01μ

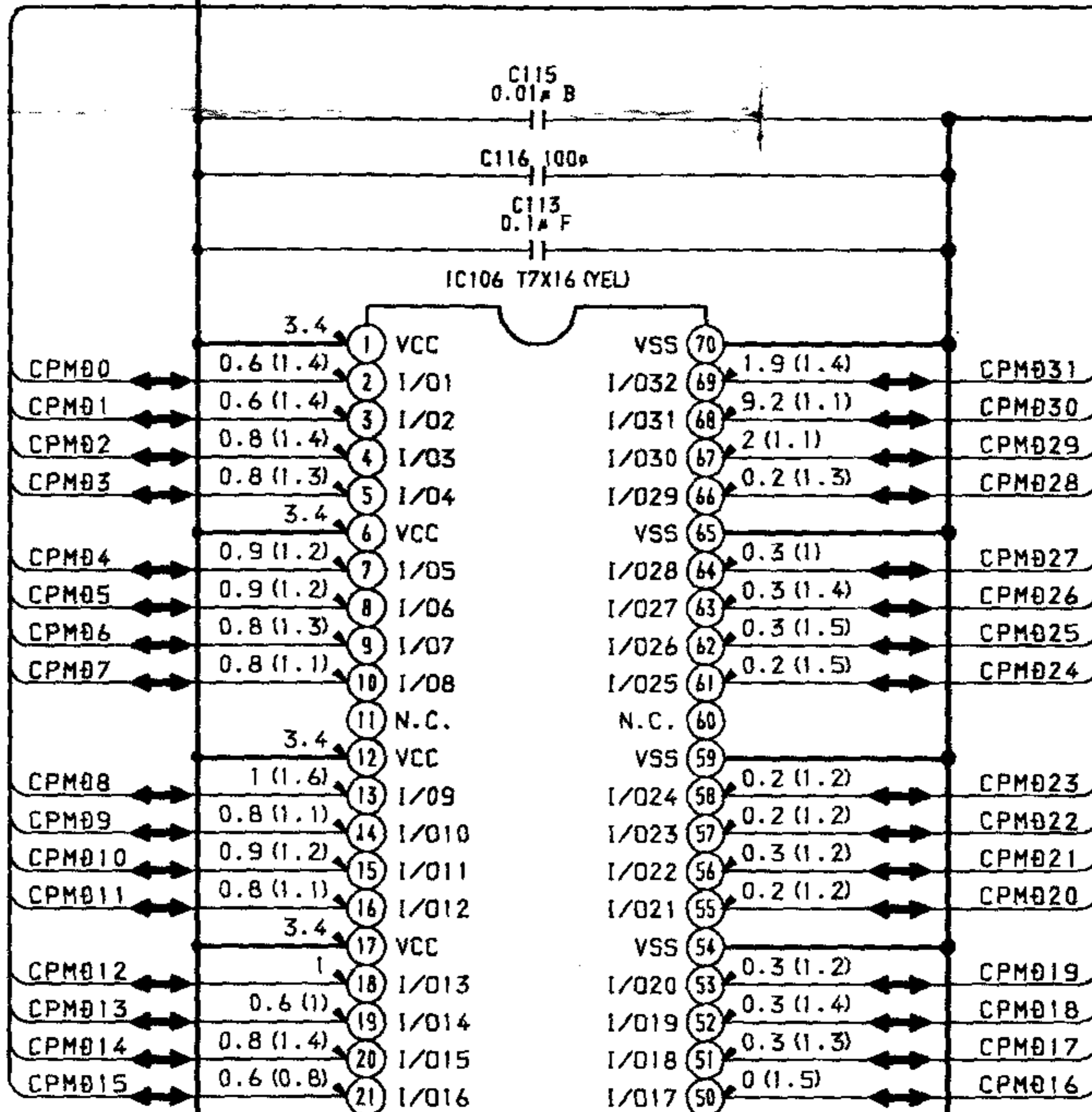
C151 0.01μ

IC203 (206) (-SYSCLK) ← ØBCLK

IC204 (5) → CPUCLK

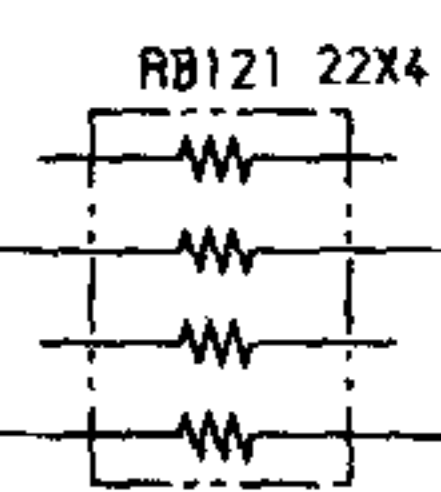
- IC203 (65) (Ø0) ↔ GPUØ0 ↔ GPUØ0
- IC203 (64) (Ø1) ↔ GPUØ1 ↔ GPUØ1
- IC203 (63) (Ø2) ↔ GPUØ2 ↔ GPUØ2
- IC203 (62) (Ø3) ↔ GPUØ3 ↔ GPUØ3
- IC203 (59) (Ø4) ↔ GPUØ4 ↔ GPUØ4
- IC203 (58) (Ø5) ↔ GPUØ5 ↔ GPUØ5
- IC203 (57) (Ø6) ↔ GPUØ6 ↔ GPUØ6
- IC203 (56) (Ø7) ↔ GPUØ7 ↔ GPUØ7
- IC203 (55) (Ø8) ↔ GPUØ8 ↔ GPUØ8
- IC203 (54) (Ø9) ↔ GPUØ9 ↔ GPUØ9
- IC203 (53) (Ø10) ↔ GPUØ10 ↔ GPUØ10
- IC203 (50) (Ø11) ↔ GPUØ11 ↔ GPUØ11
- IC203 (49) (Ø12) ↔ GPUØ12 ↔ GPUØ12
- IC203 (48) (Ø13) ↔ GPUØ13 ↔ GPUØ13
- IC203 (47) (Ø14) ↔ GPUØ14 ↔ GPUØ14
- IC203 (46) (Ø15) ↔ GPUØ15 ↔ GPUØ15
- IC203 (45) (Ø16) ↔ GPUØ16 ↔ GPUØ16
- IC203 (42) (Ø17) ↔ GPUØ17 ↔ GPUØ17
- IC203 (41) (Ø18) ↔ GPUØ18 ↔ GPUØ18
- IC203 (40) (Ø19) ↔ GPUØ19 ↔ GPUØ19
- IC203 (39) (Ø20) ↔ GPUØ20 ↔ GPUØ20
- IC203 (36) (Ø21) ↔ GPUØ21 ↔ GPUØ21
- IC203 (35) (Ø22) ↔ GPUØ22 ↔ GPUØ22
- IC203 (34) (Ø23) ↔ GPUØ23 ↔ GPUØ23
- IC203 (33) (Ø24) ↔ GPUØ24 ↔ GPUØ24
- IC203 (32) (Ø25) ↔ GPUØ25 ↔ GPUØ25
- IC203 (31) (Ø26) ↔ GPUØ26 ↔ GPUØ26
- IC203 (28) (Ø27) ↔ GPUØ27 ↔ GPUØ27
- IC203 (27) (Ø28) ↔ GPUØ28 ↔ GPUØ28
- IC203 (26) (Ø29) ↔ GPUØ29 ↔ GPUØ29
- IC203 (25) (Ø30) ↔ GPUØ30 ↔ GPUØ30
- IC203 (24) (Ø31) ↔ GPUØ31 ↔ GPUØ31

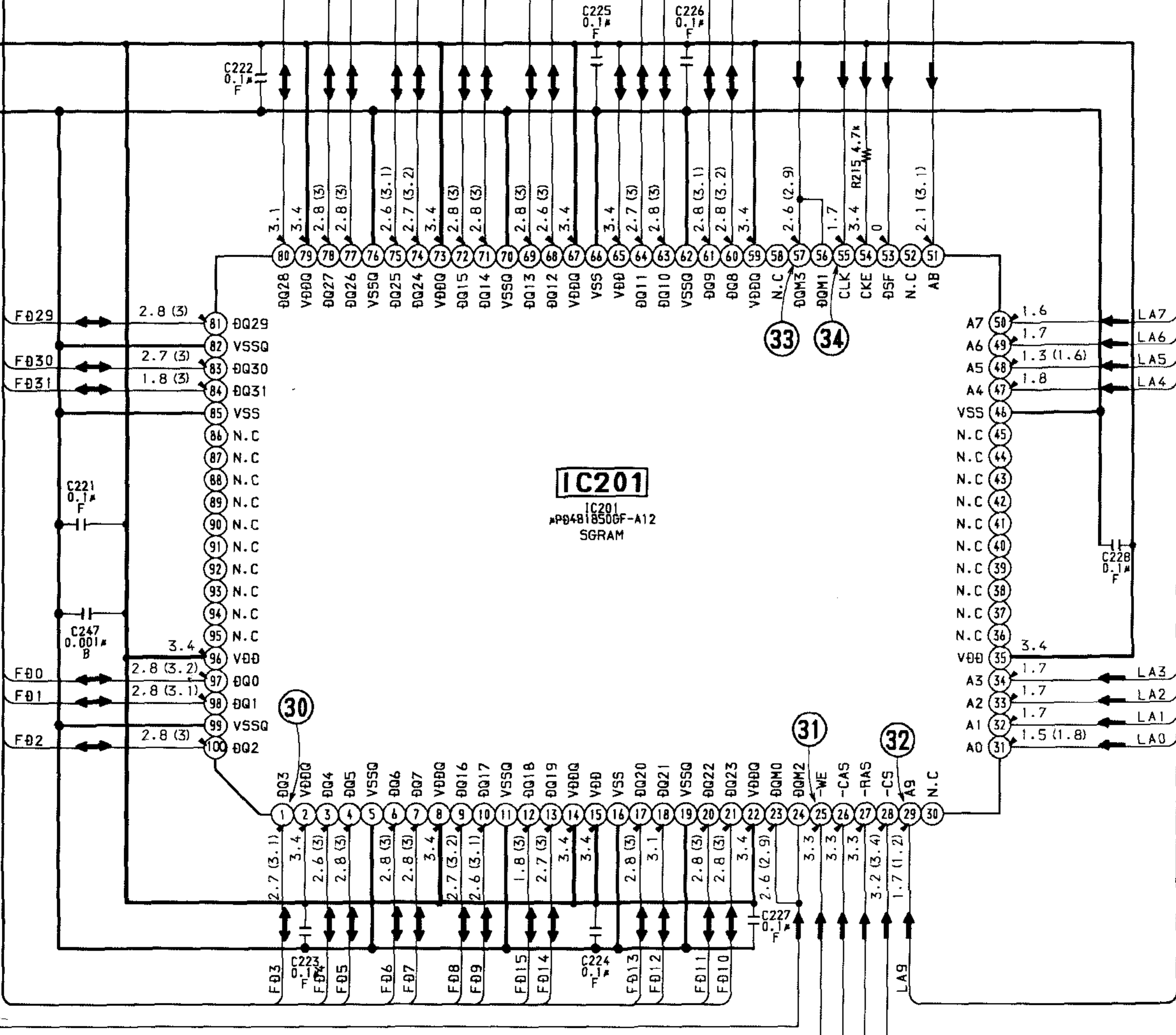
IC203 (6) (-RST) ← RES3.3Ø

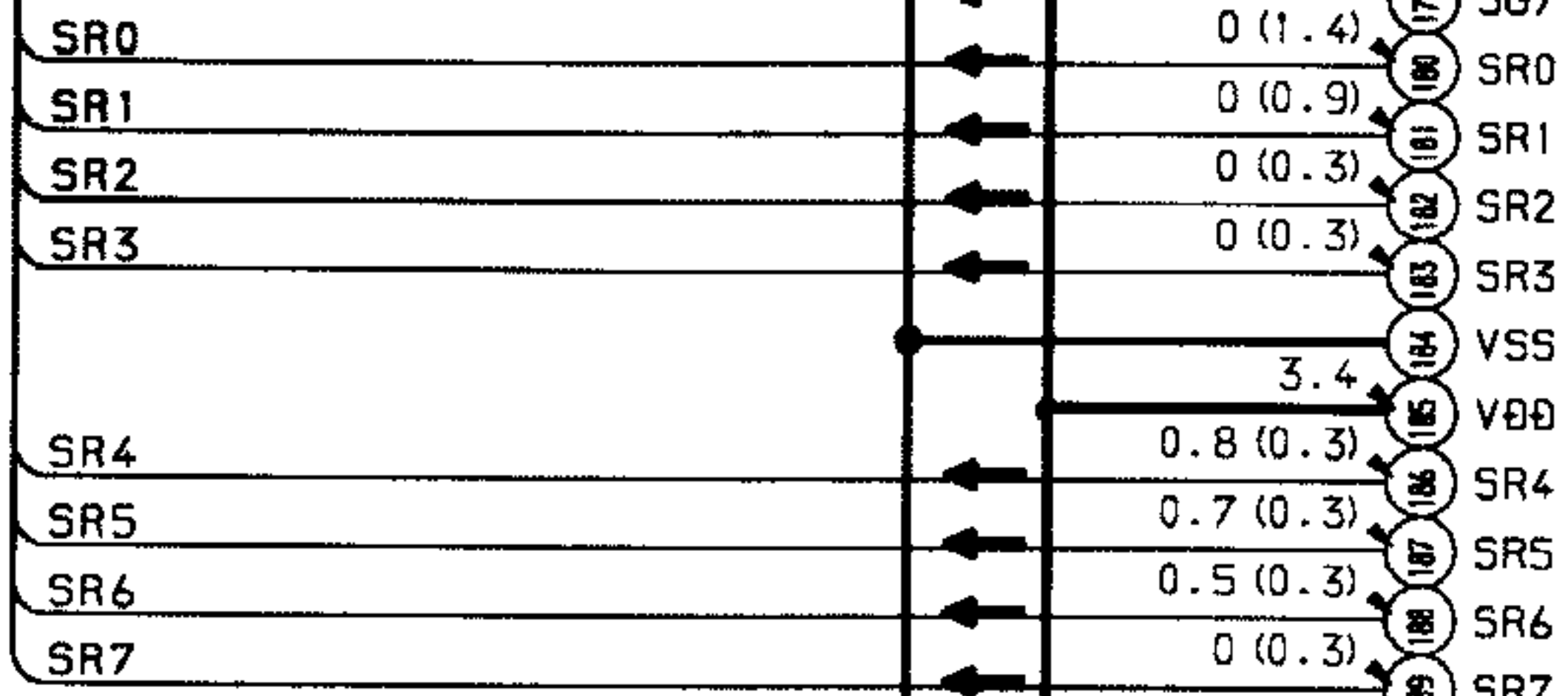


IC106
DRAM

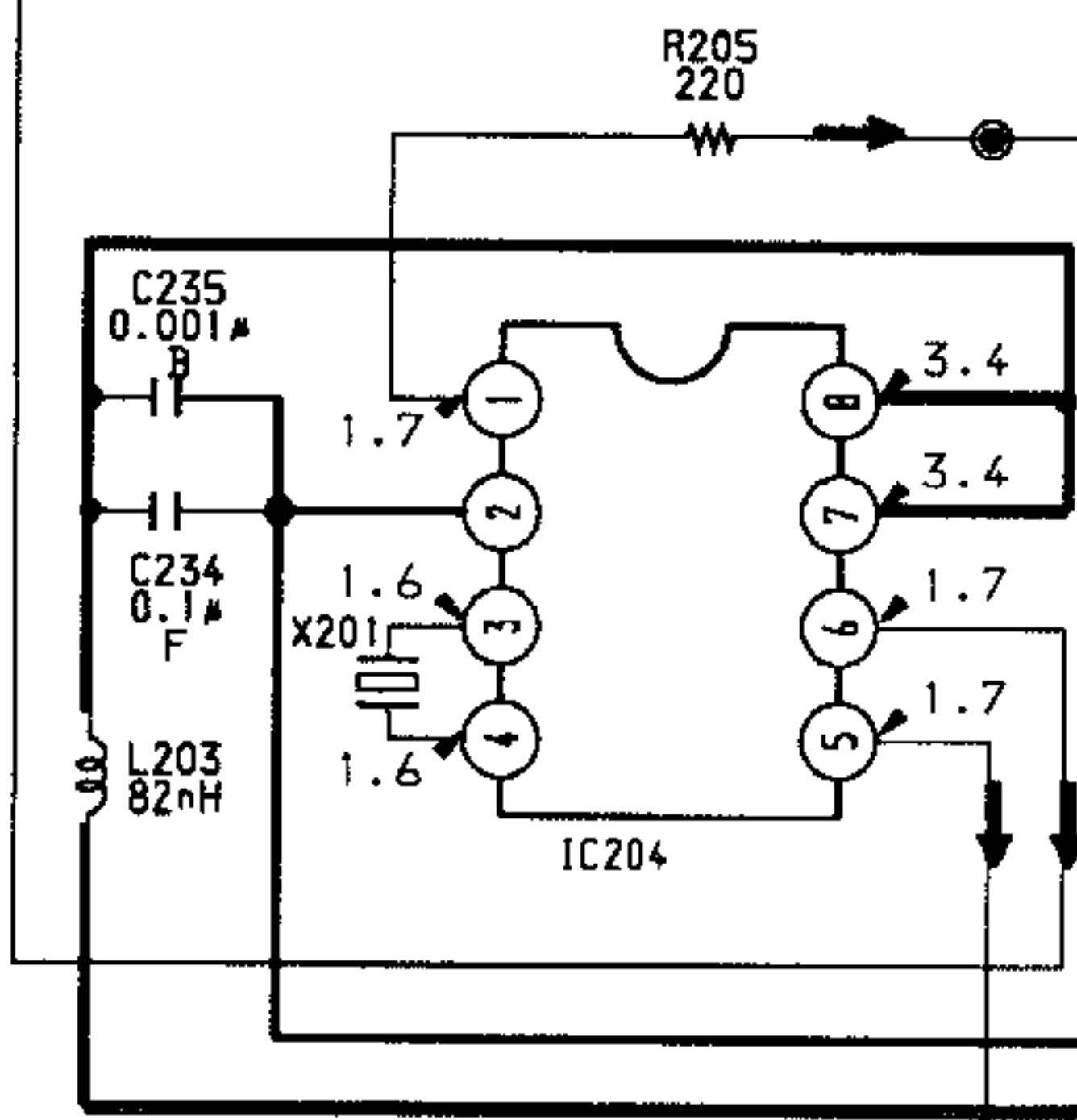
C118 0.001µ B
C122 0.001µ B







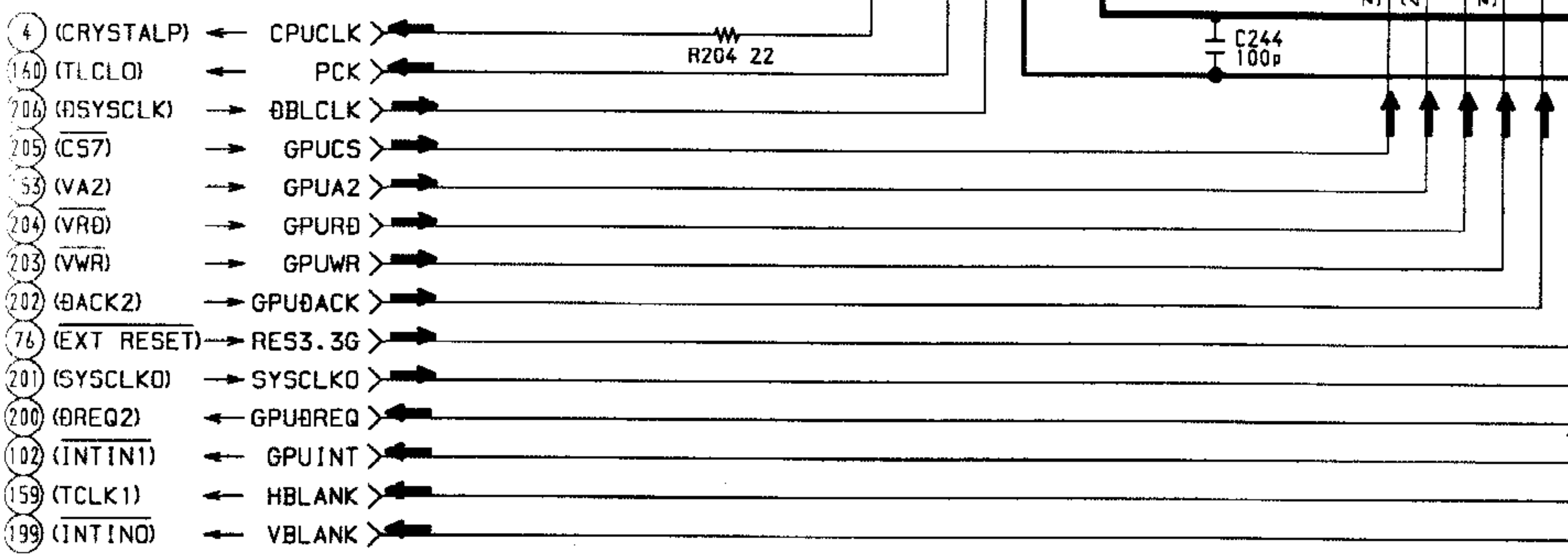
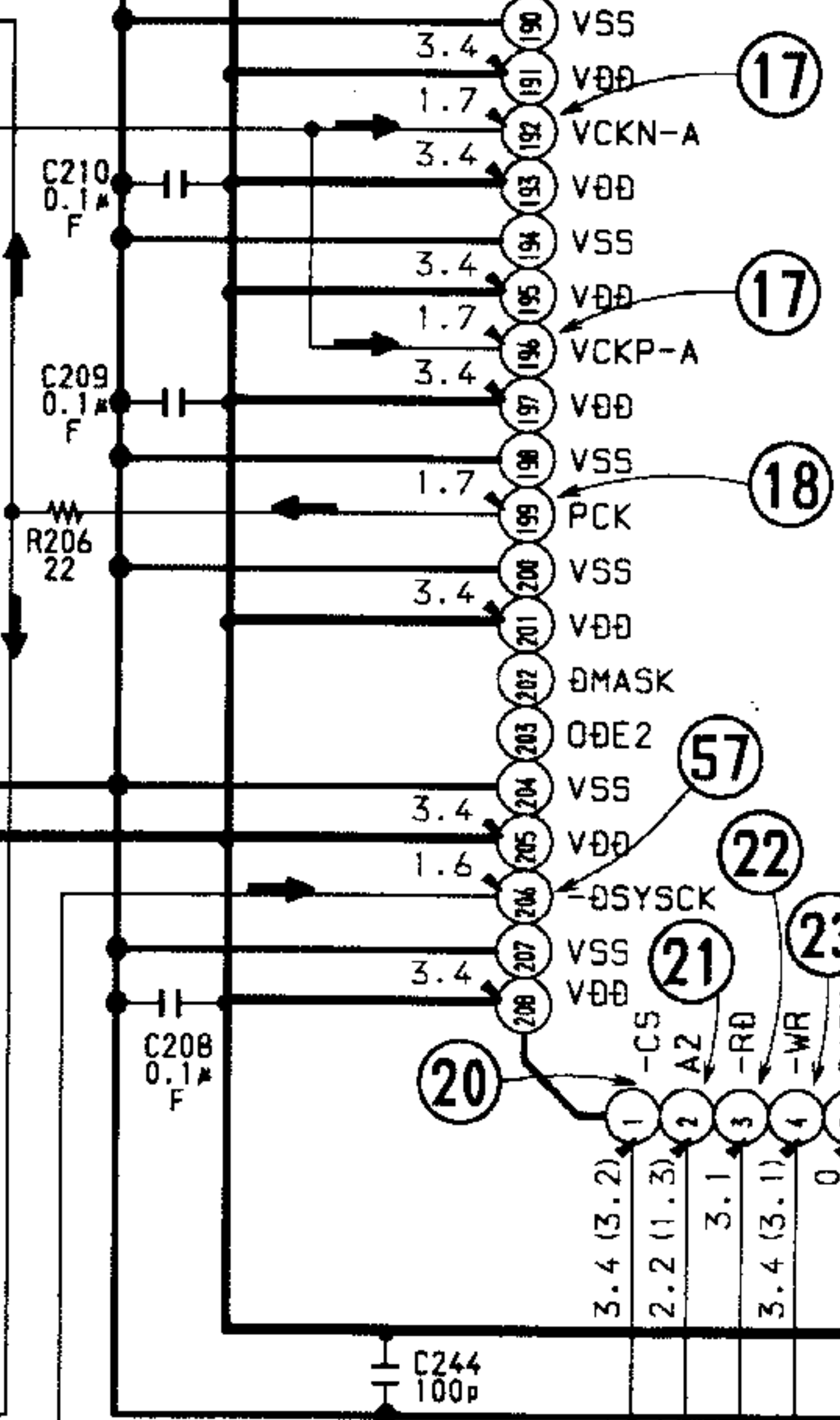
X201
14.32MHz (7500, 7501, 7503)
17.73MHz (7502)



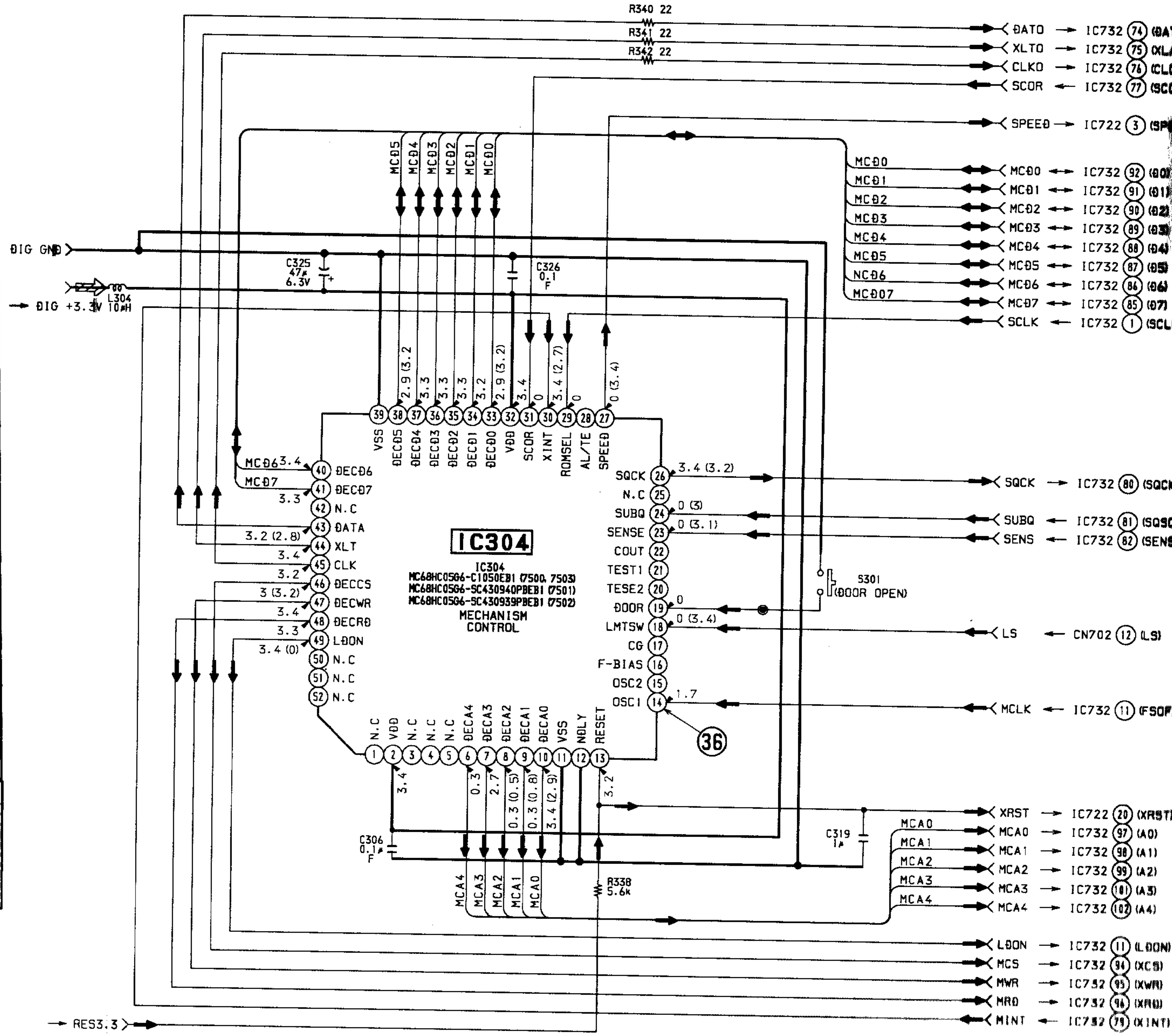
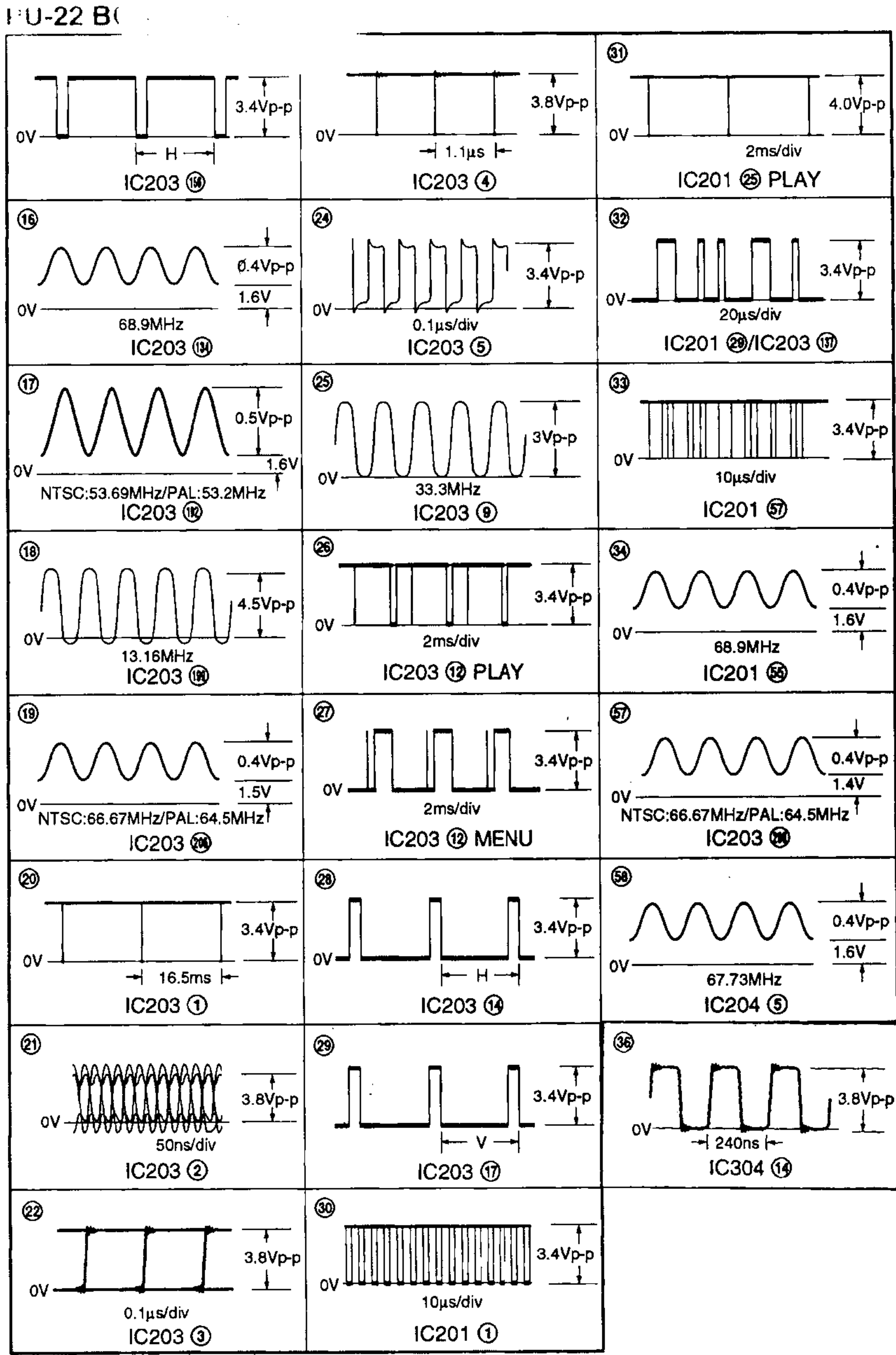
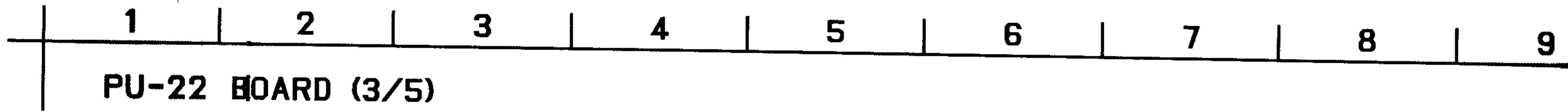
IC204

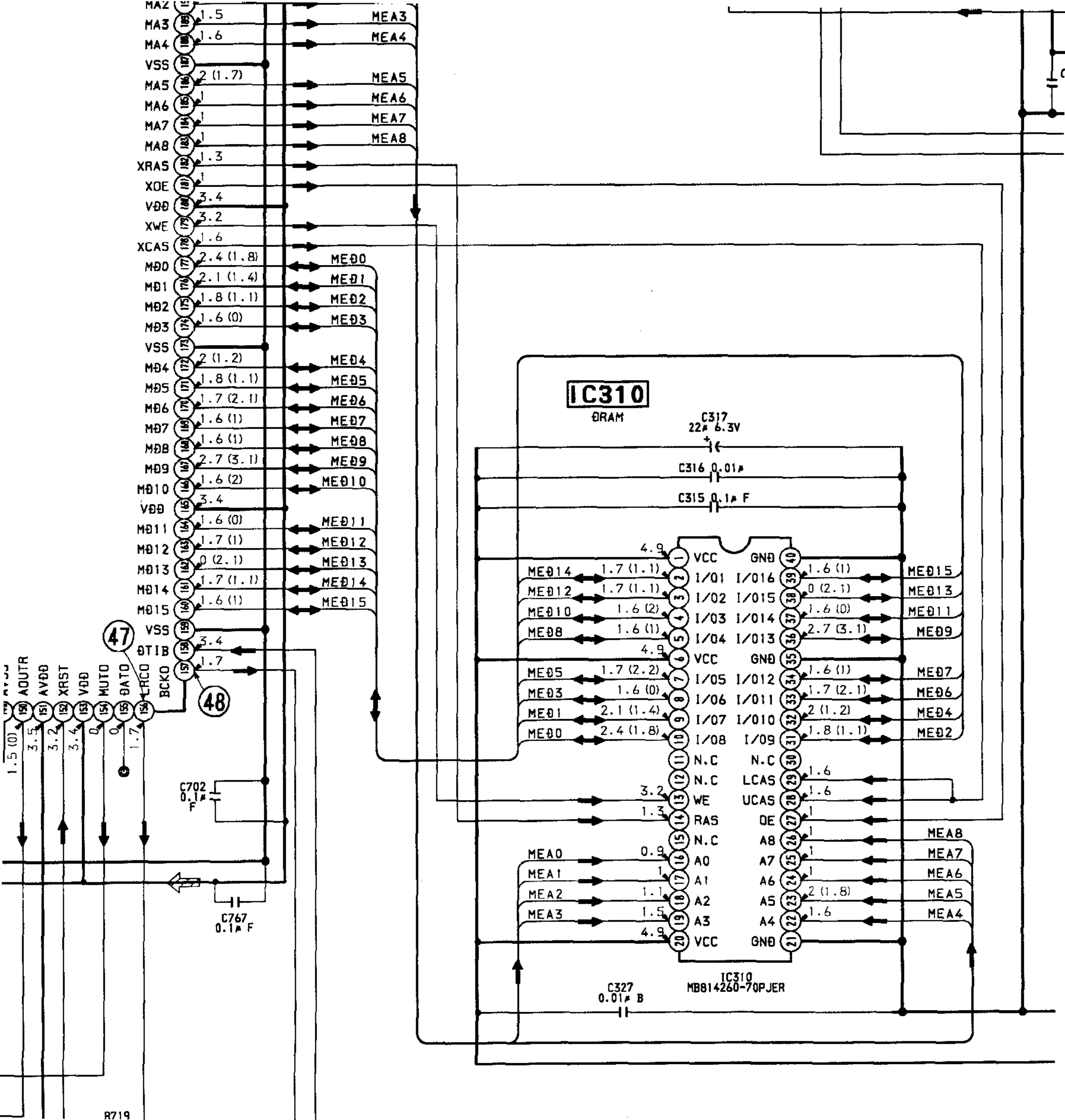
IC204
CY2081SL-500T (7500, 7501, 7503)
CY2081SL-509T (7502)
CLOCK GEN

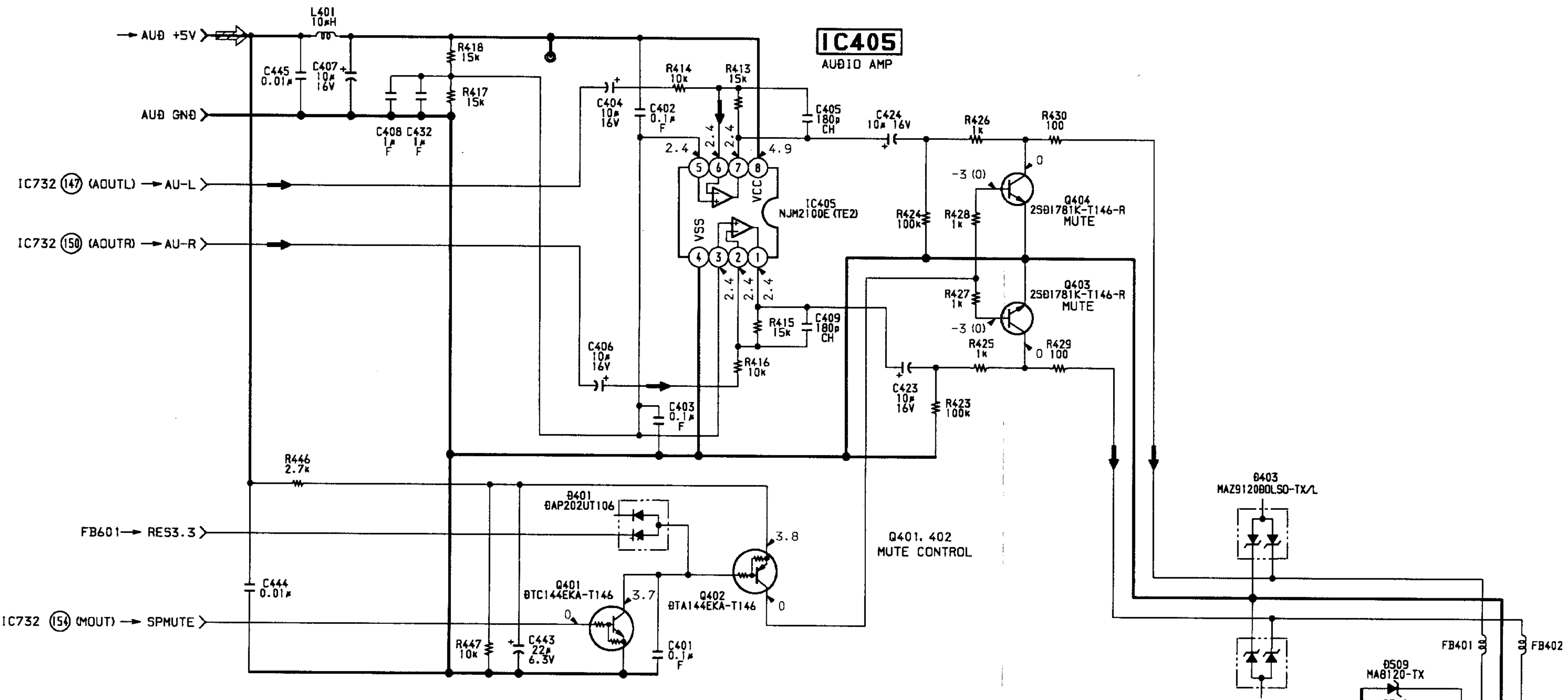
(58)

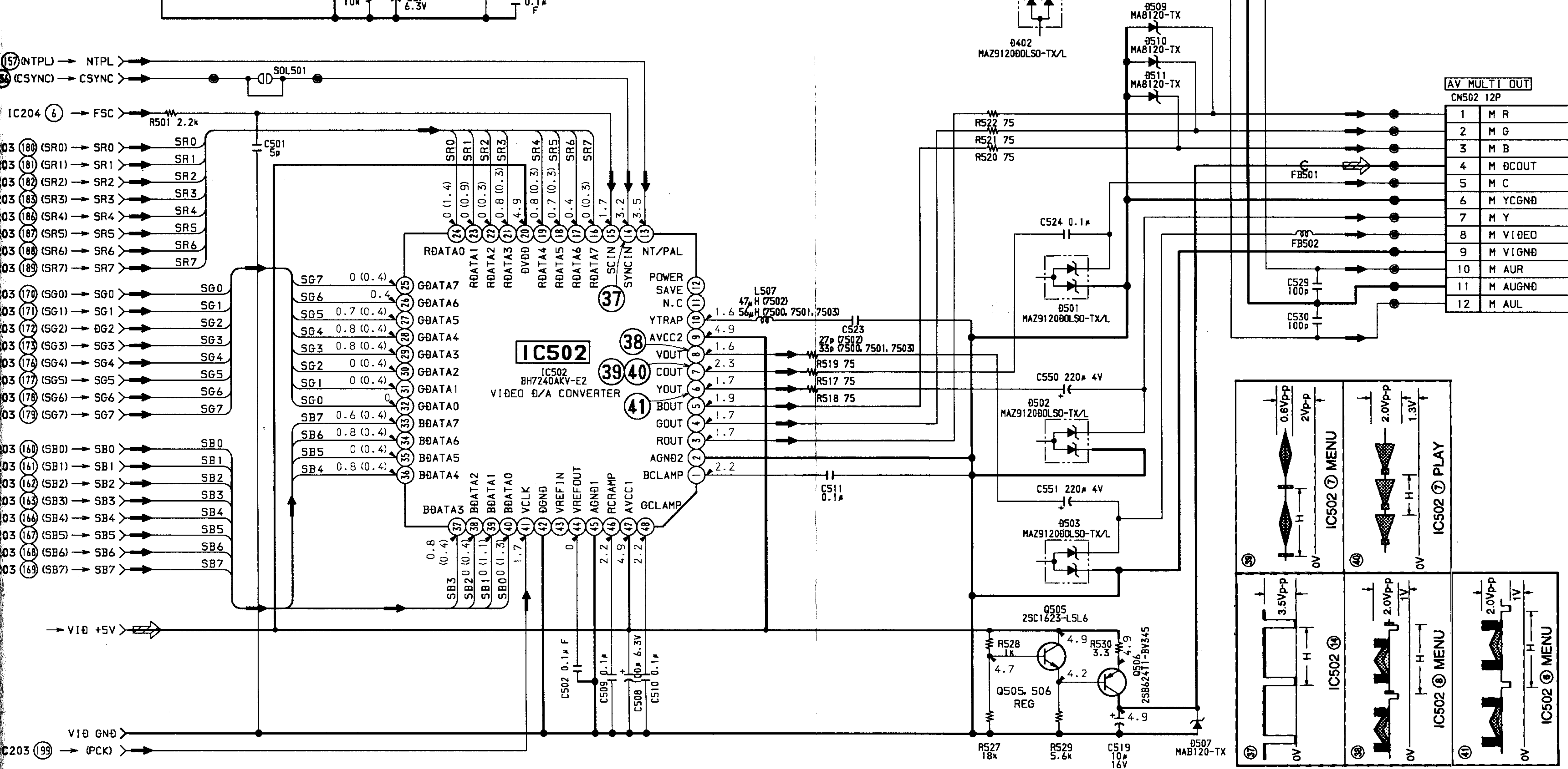


6-5. SCHEMATIC DIAGRAM (PU-22 (-11/-12/-21/-22/-32) BOARD (3/5))





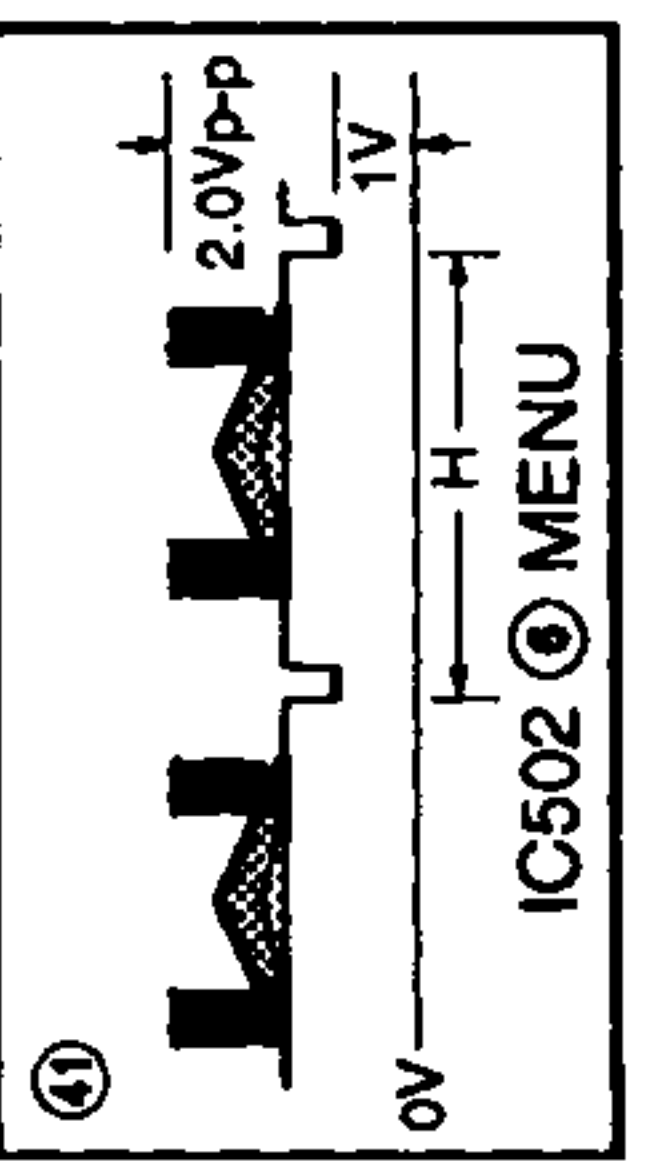
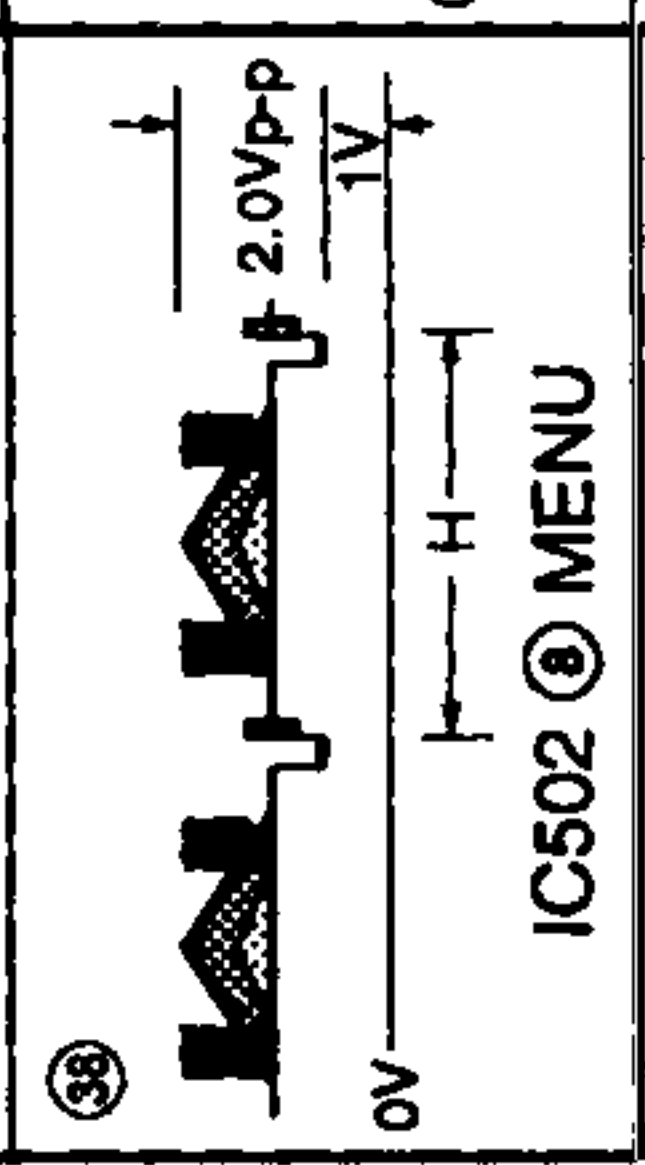
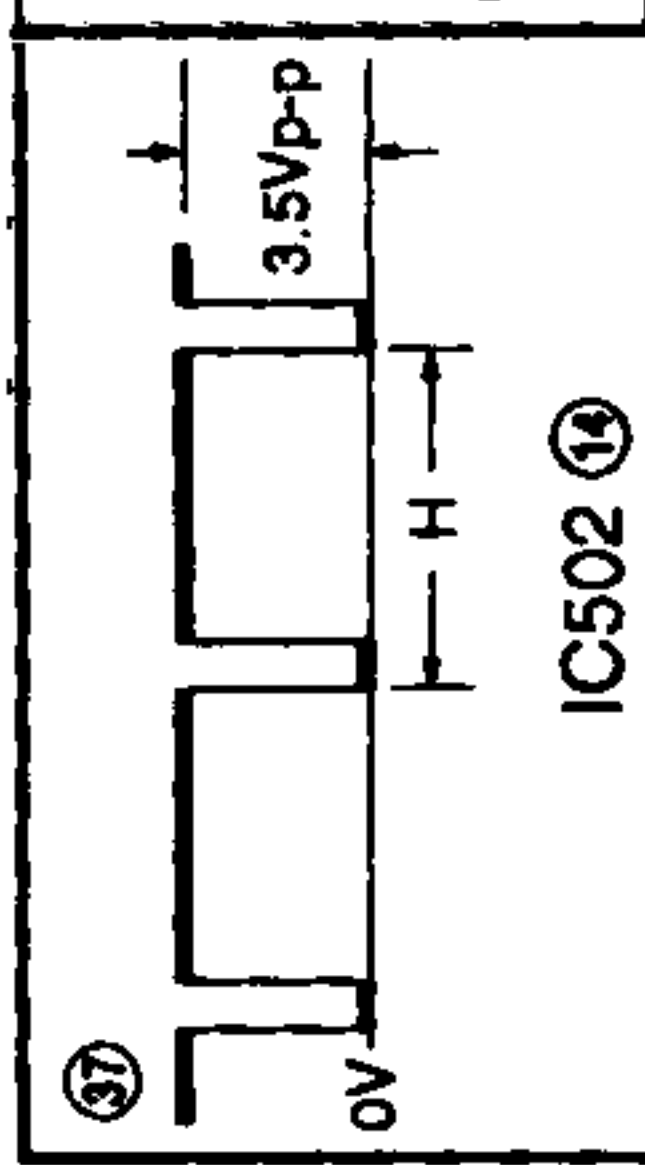
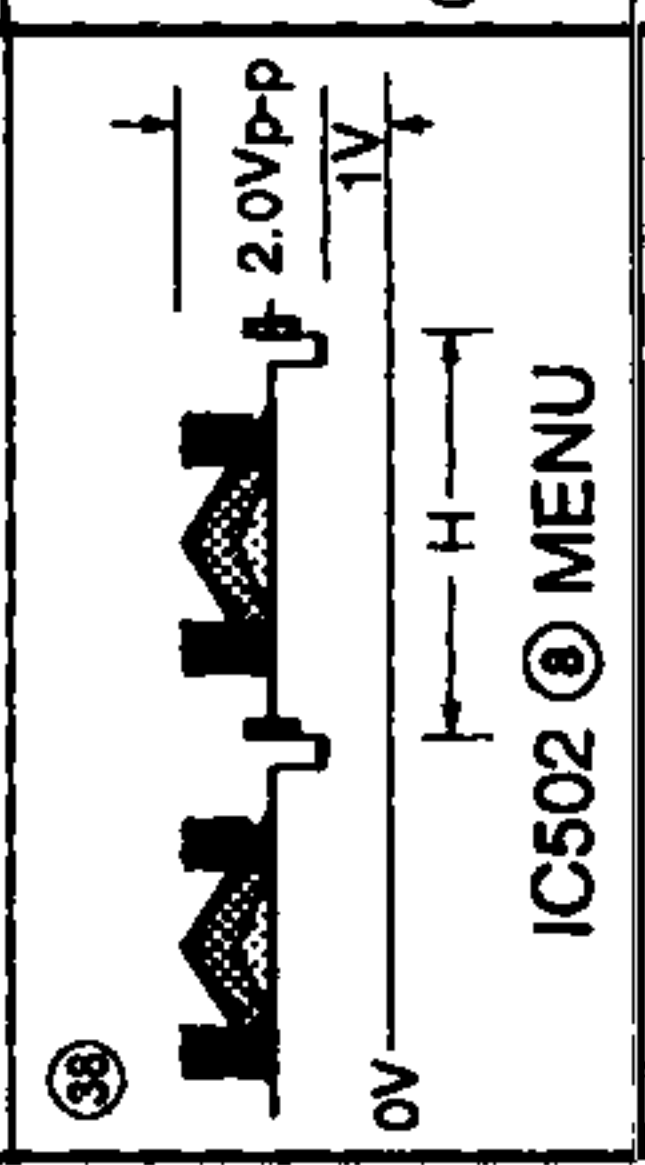
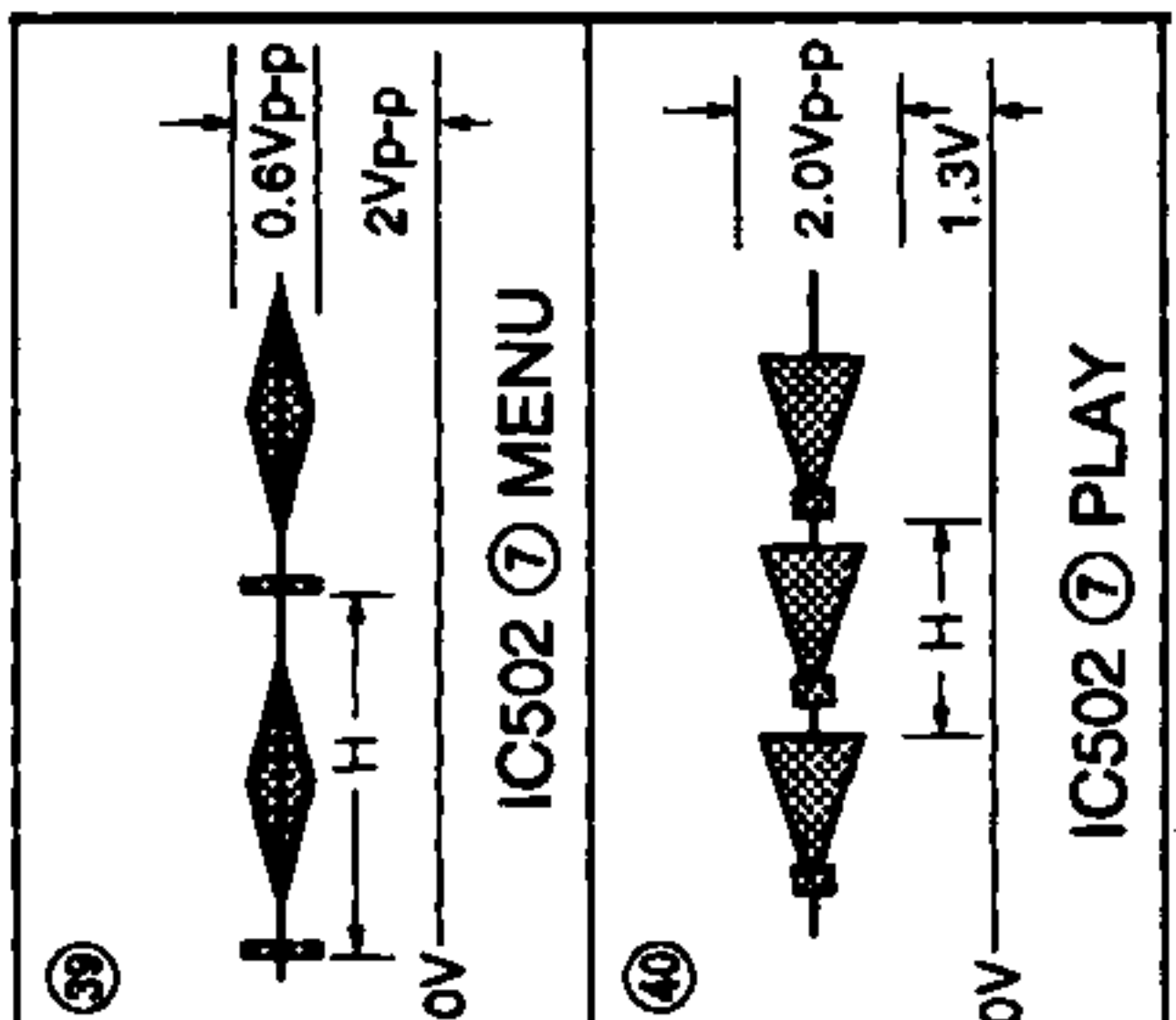


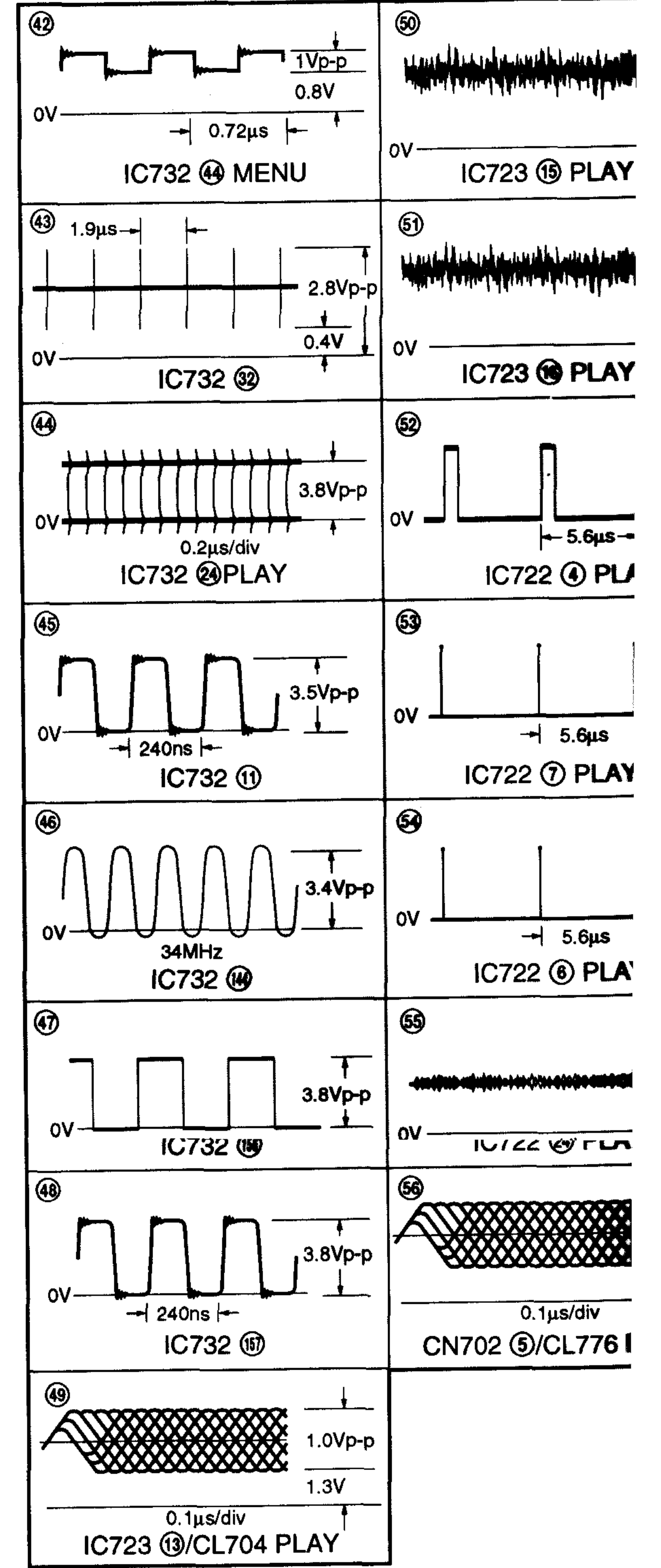
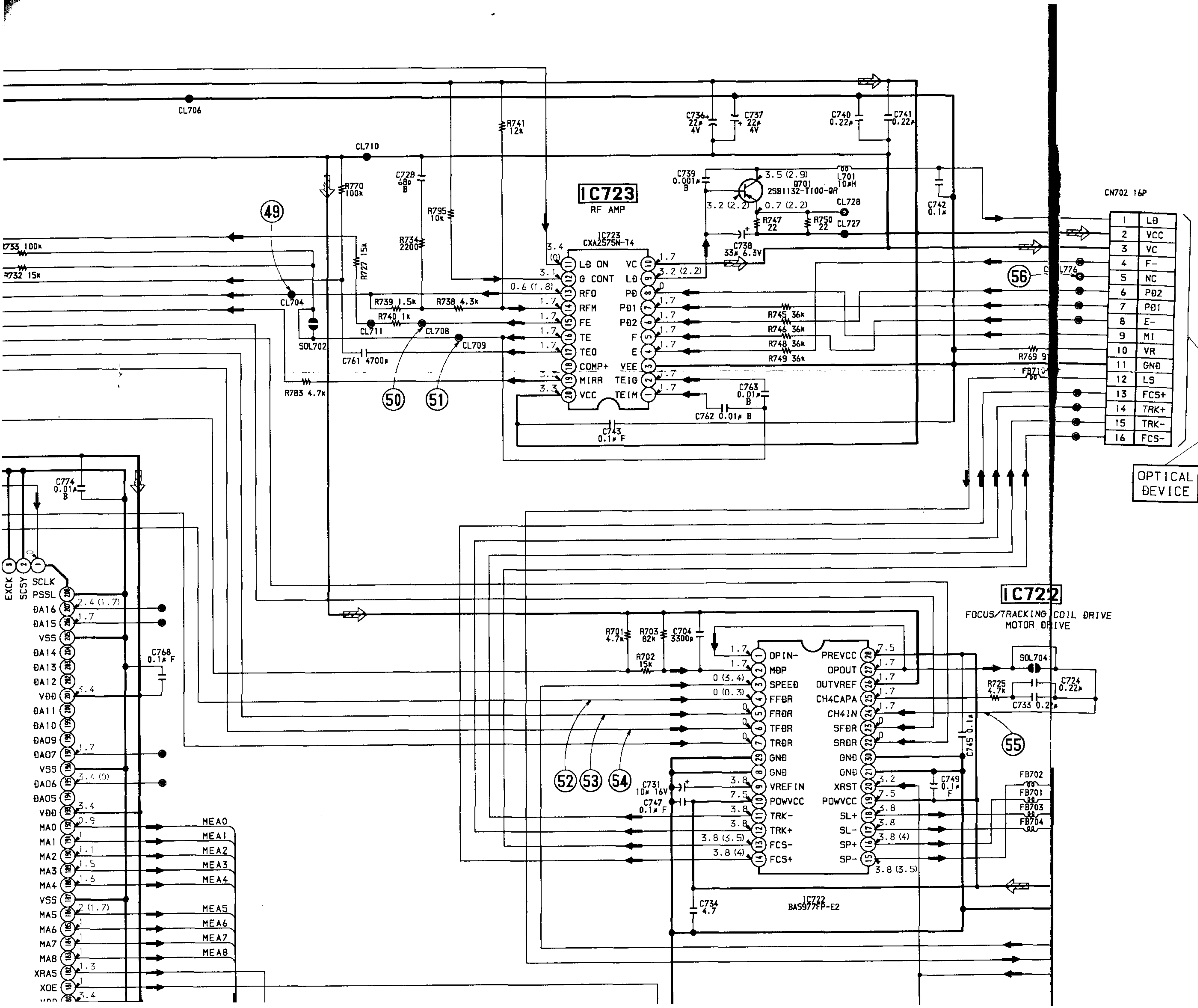


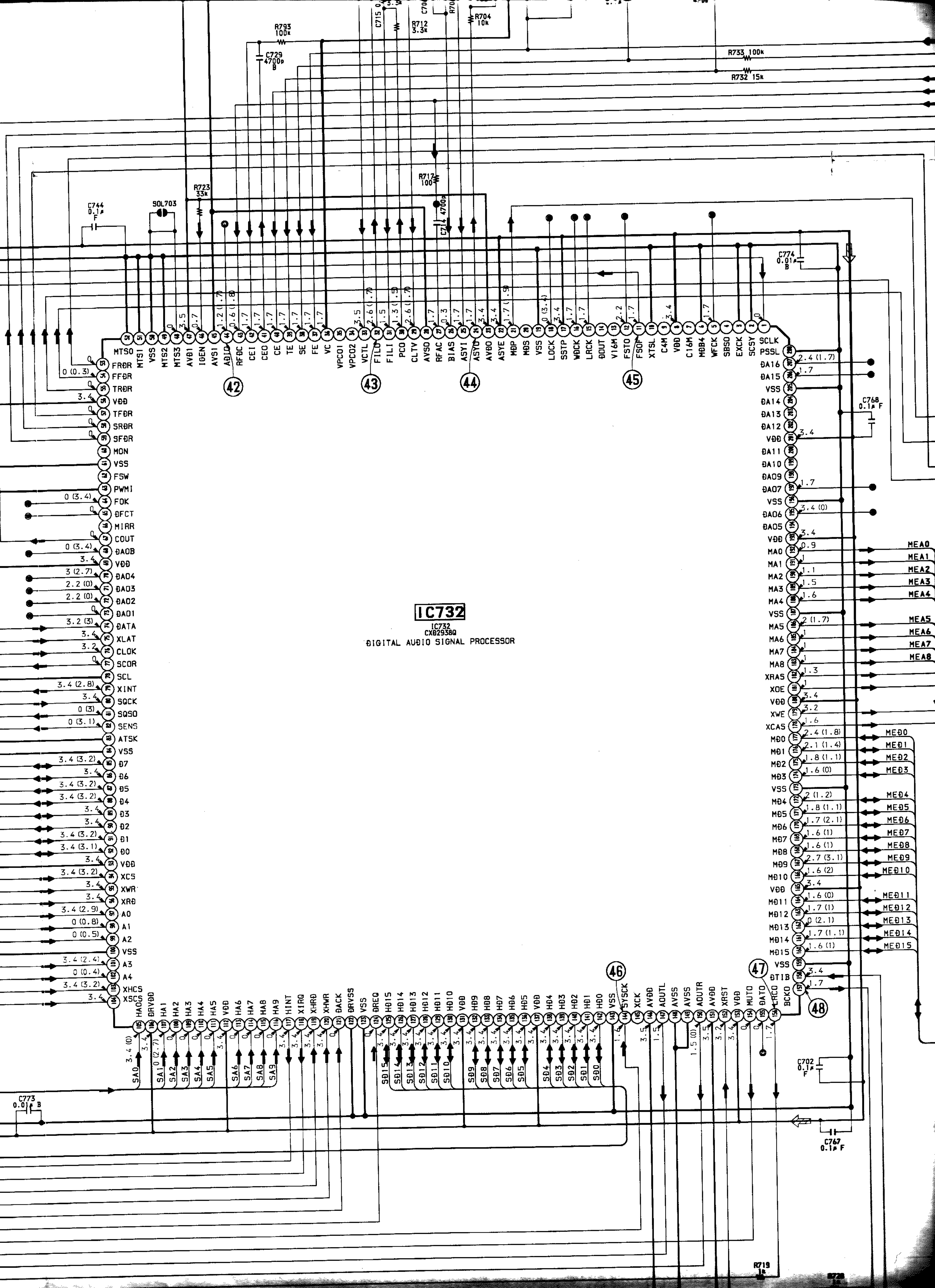
AV MULTI OUT

CN502 12P

1	M R
2	M G
3	M B
4	M ØCOUT
5	M C
6	M YCGND
7	M Y
8	M VIDEO
9	M VIGNØ
10	M AUR
11	M AUGND
12	M AUL

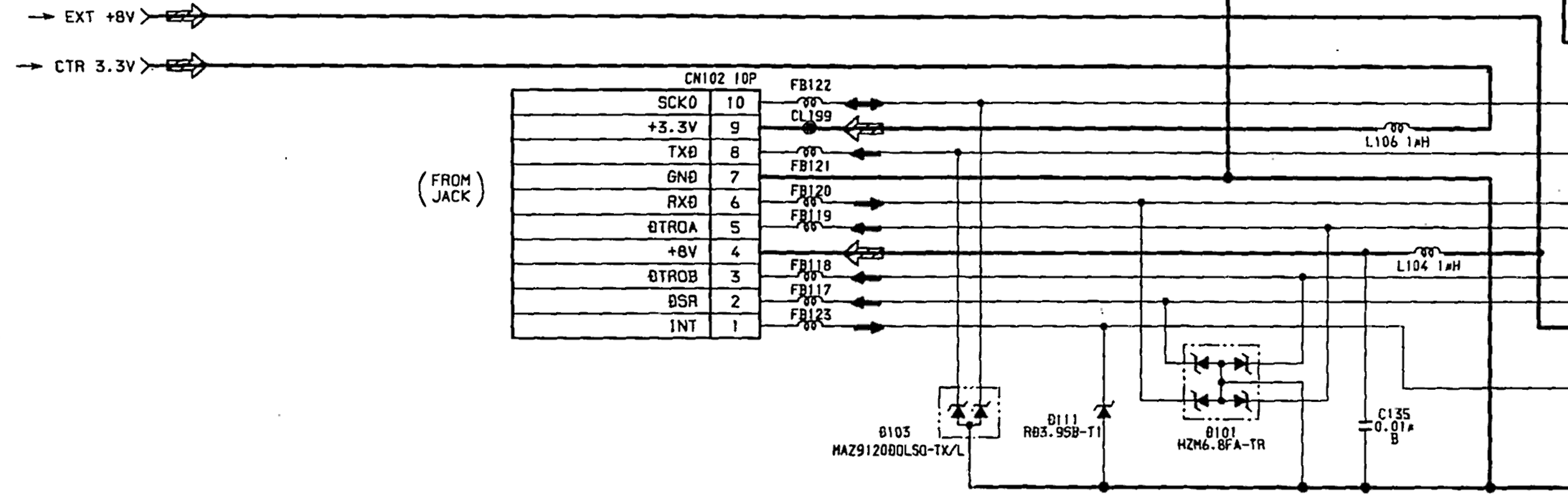
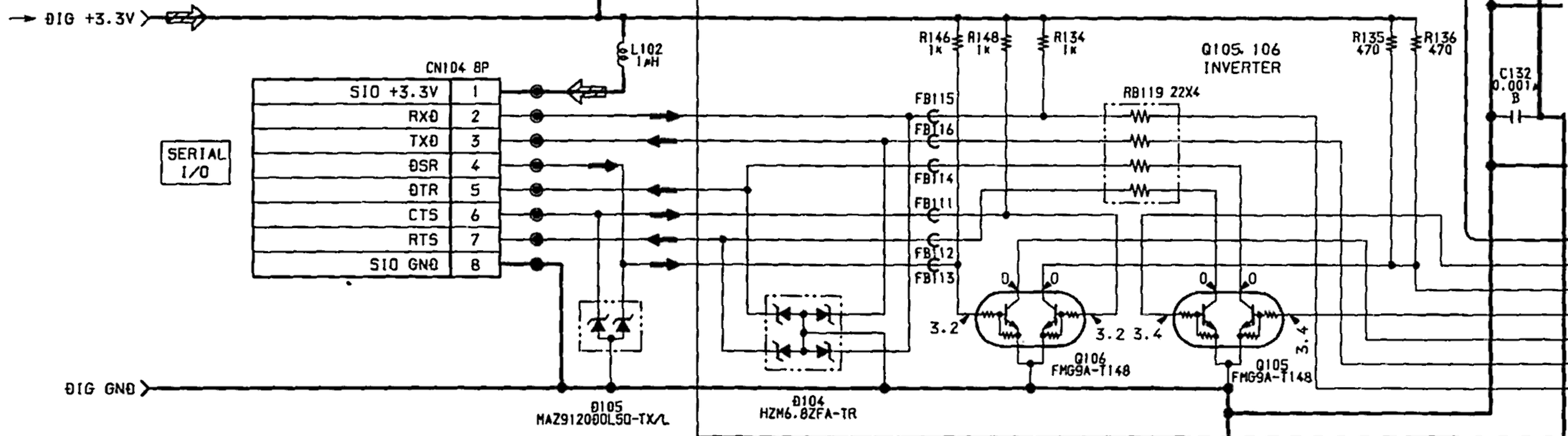






IC732

IC732
CX829380
DIGITAL AUDIO SIGNAL PROCESSOR

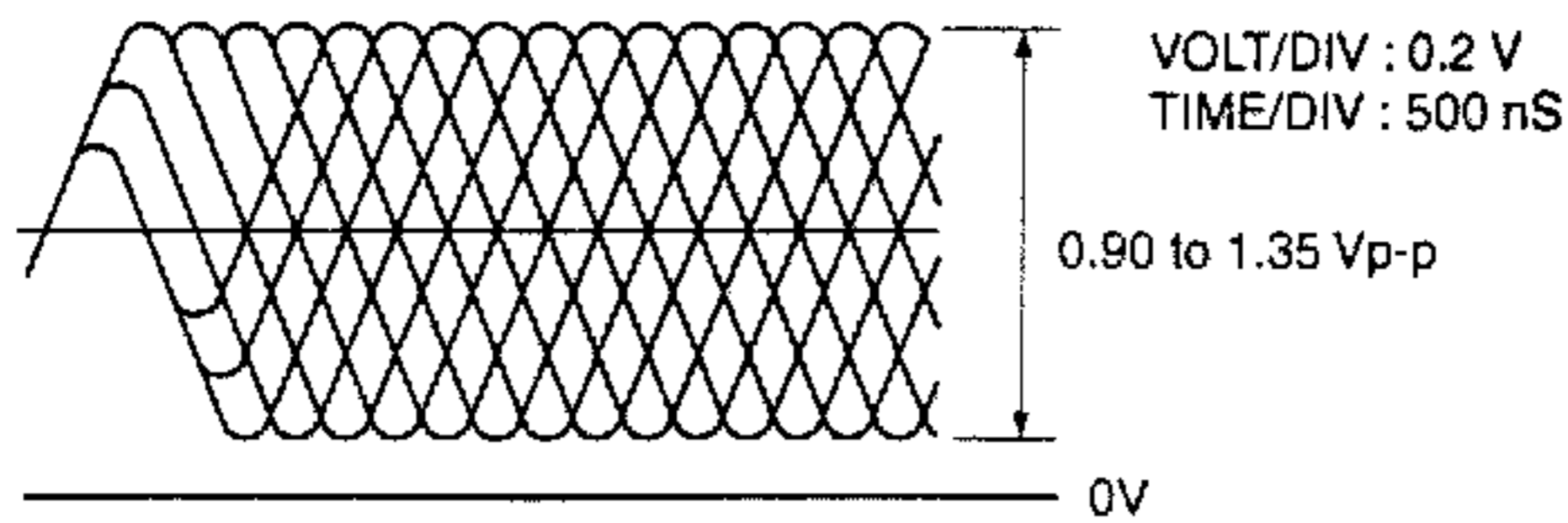


SECTION 3 ADJUSTMENTS

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.

