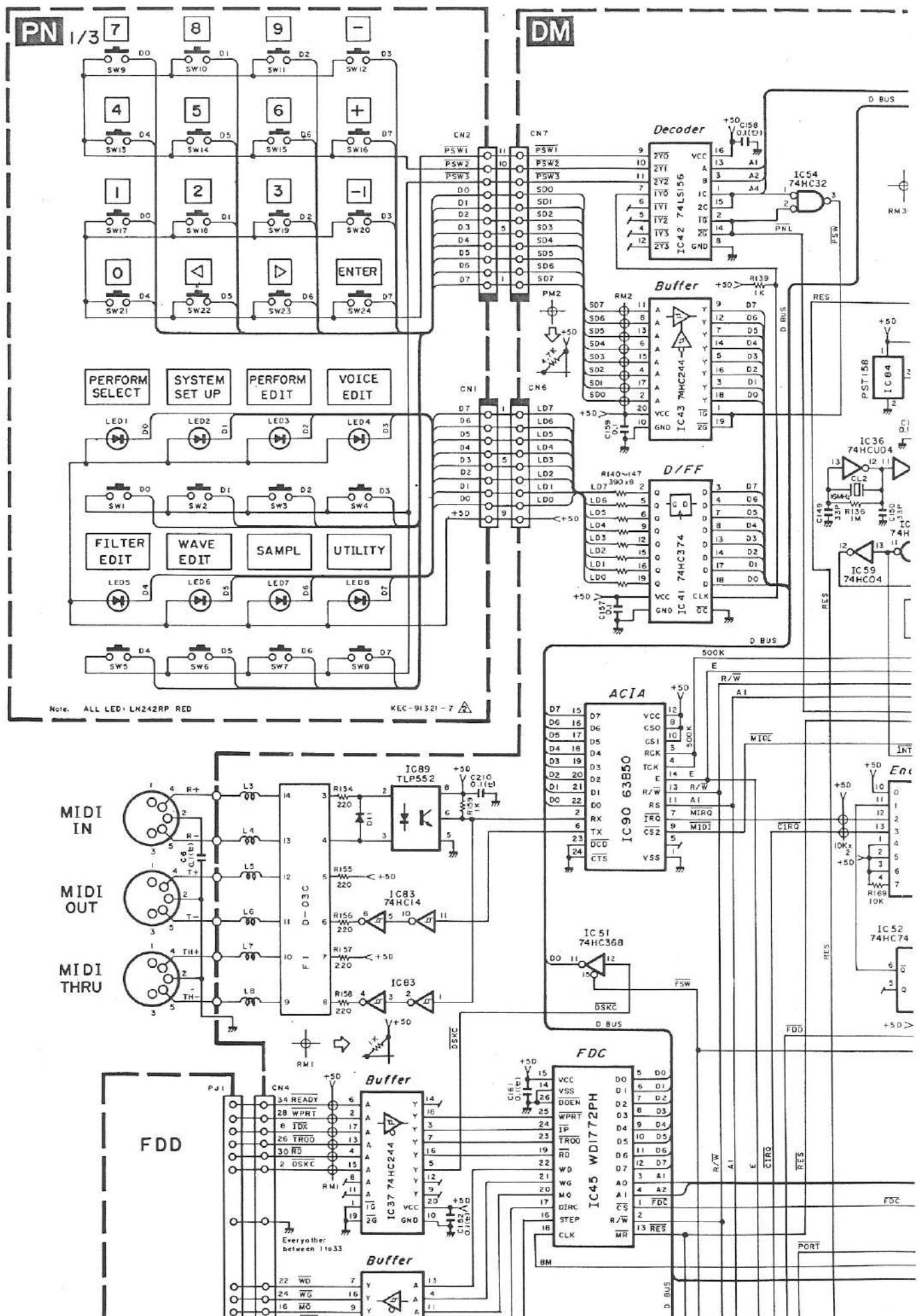
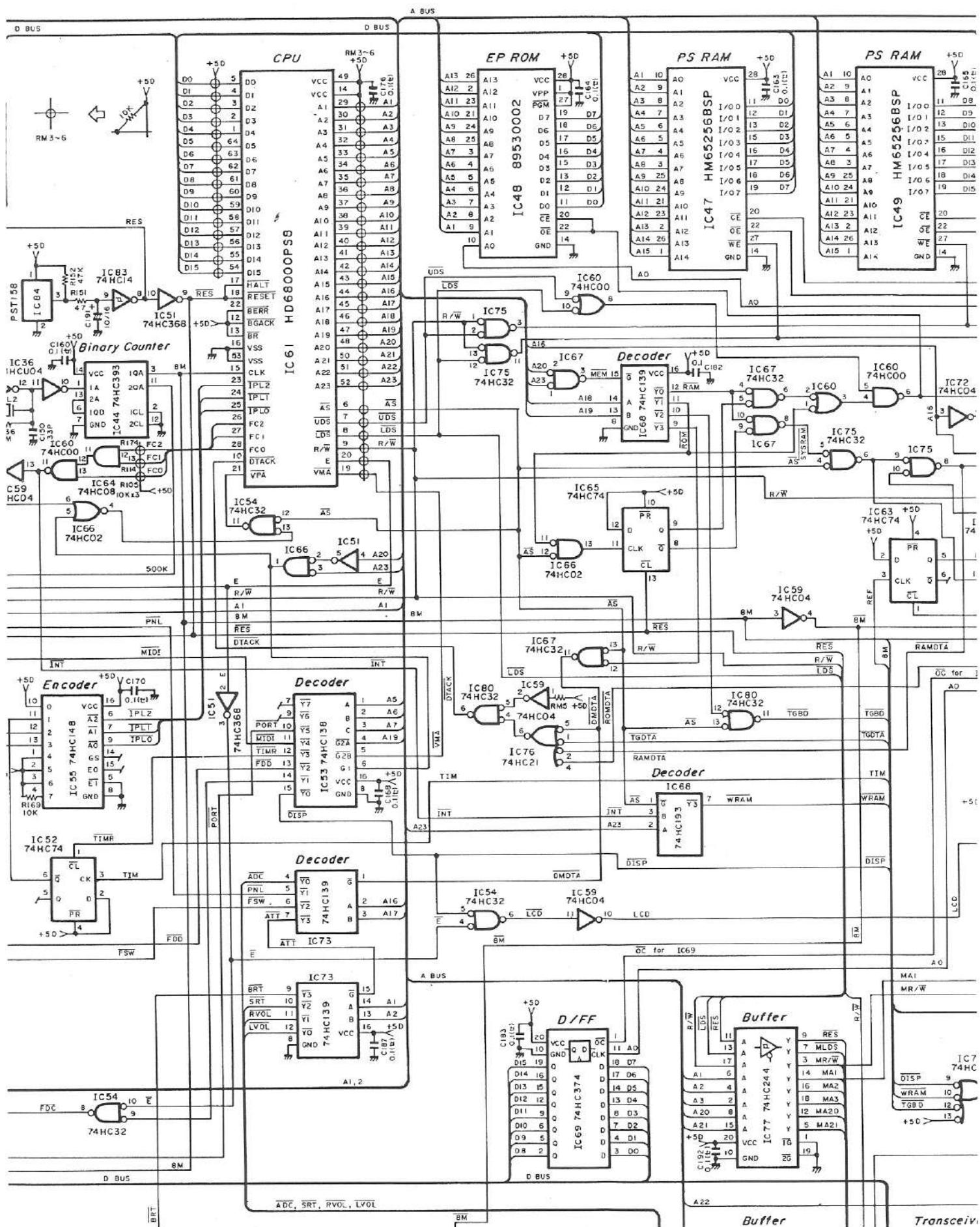
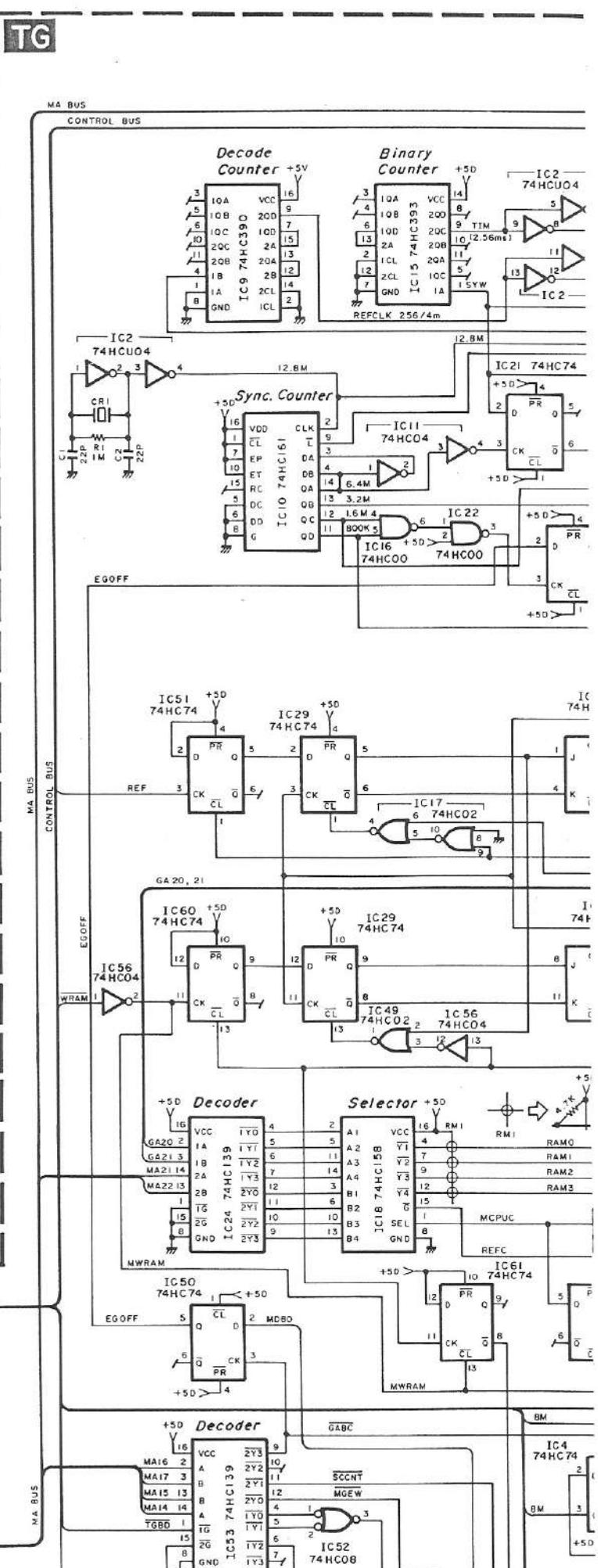
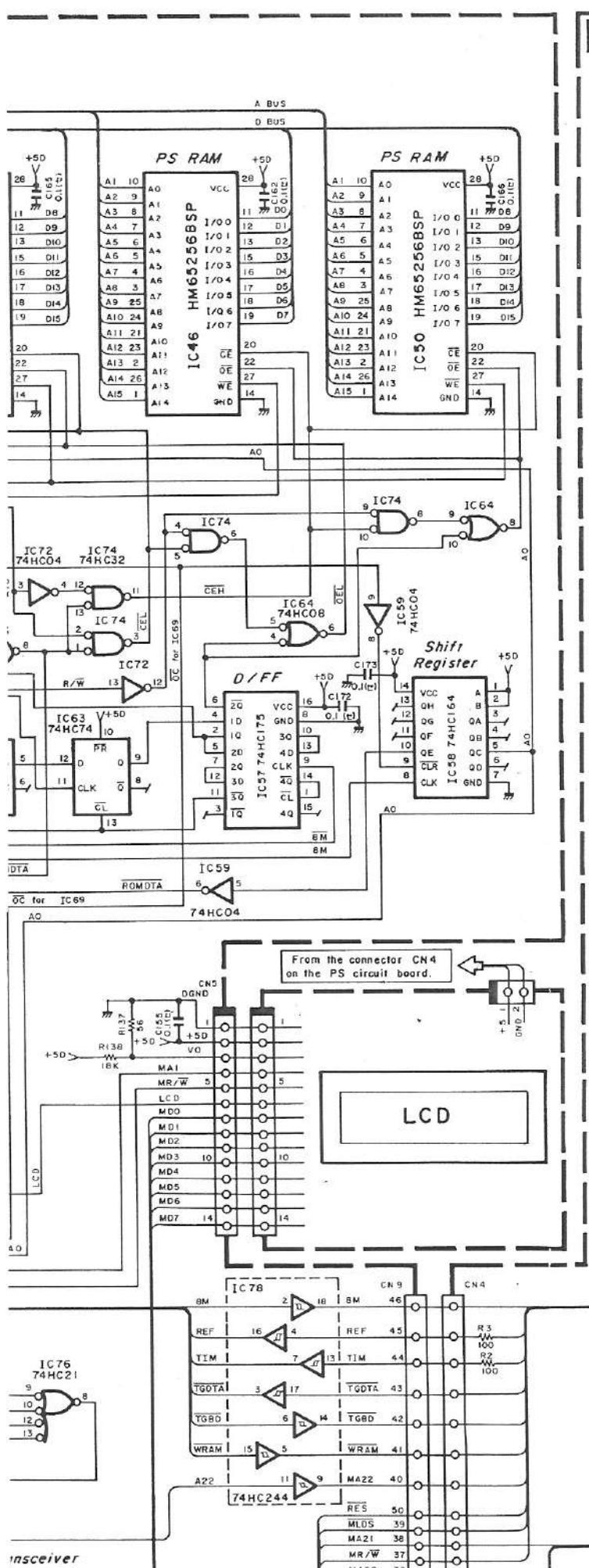


■ TX16W OVERALL CIRCUIT DIAGRAM





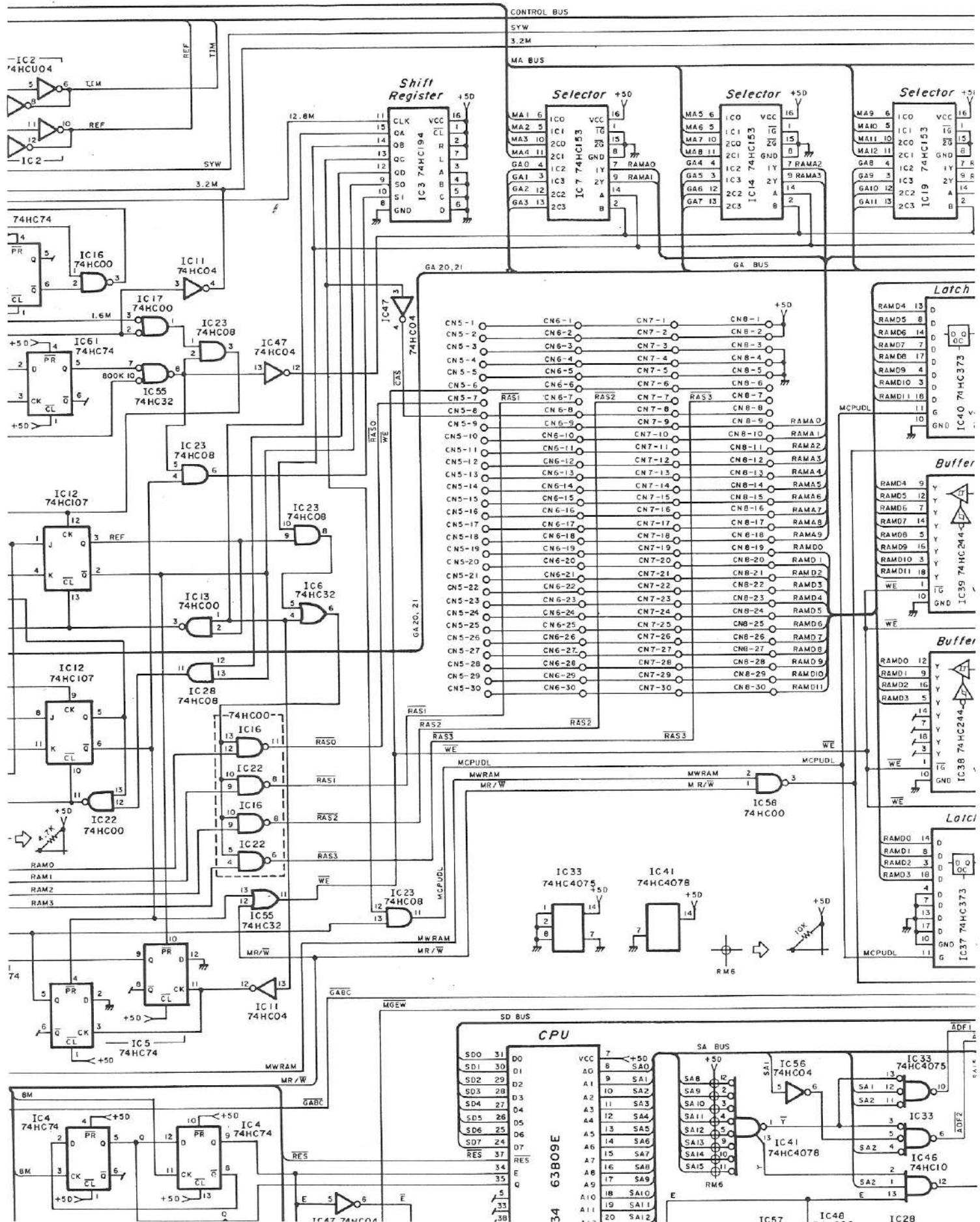


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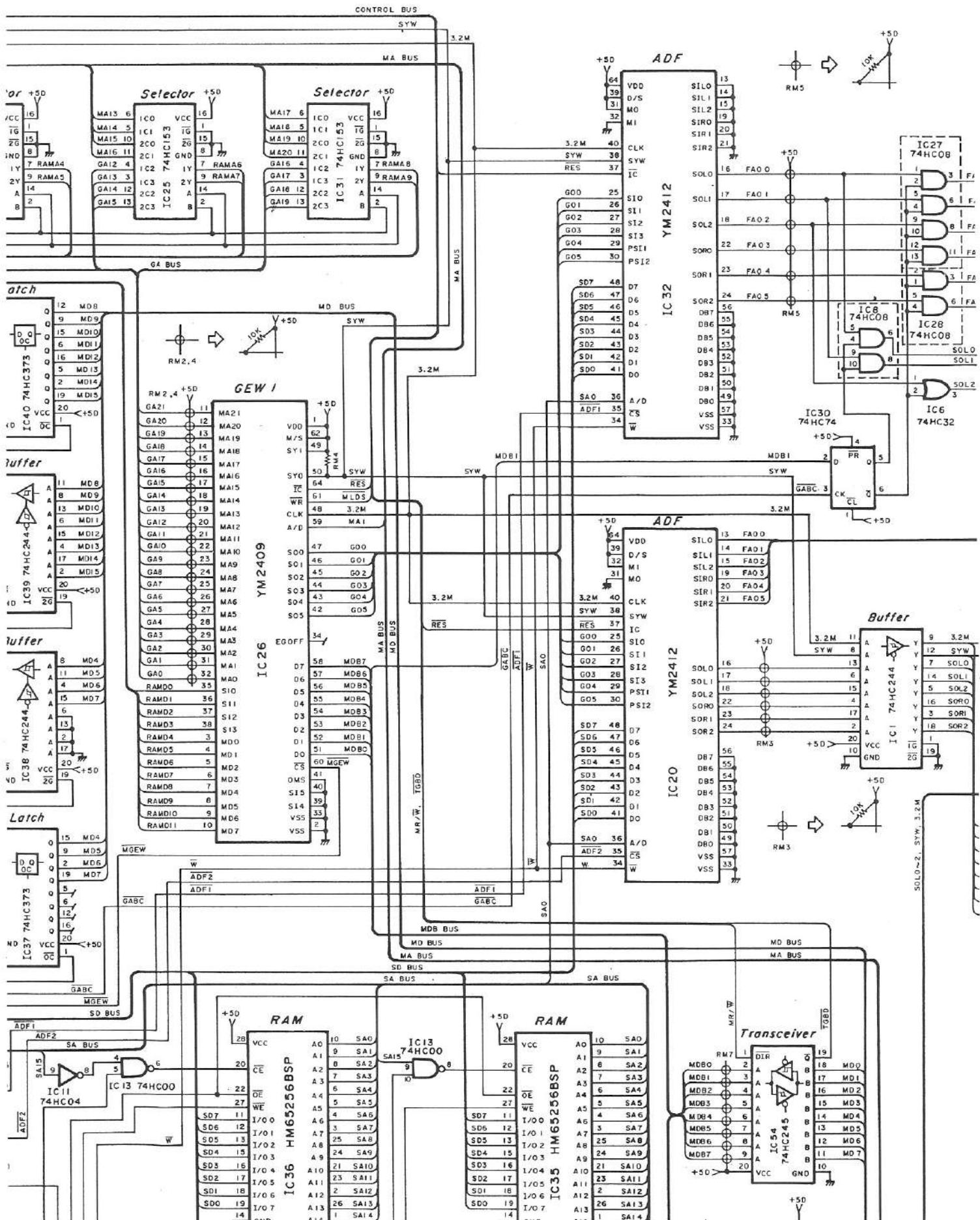


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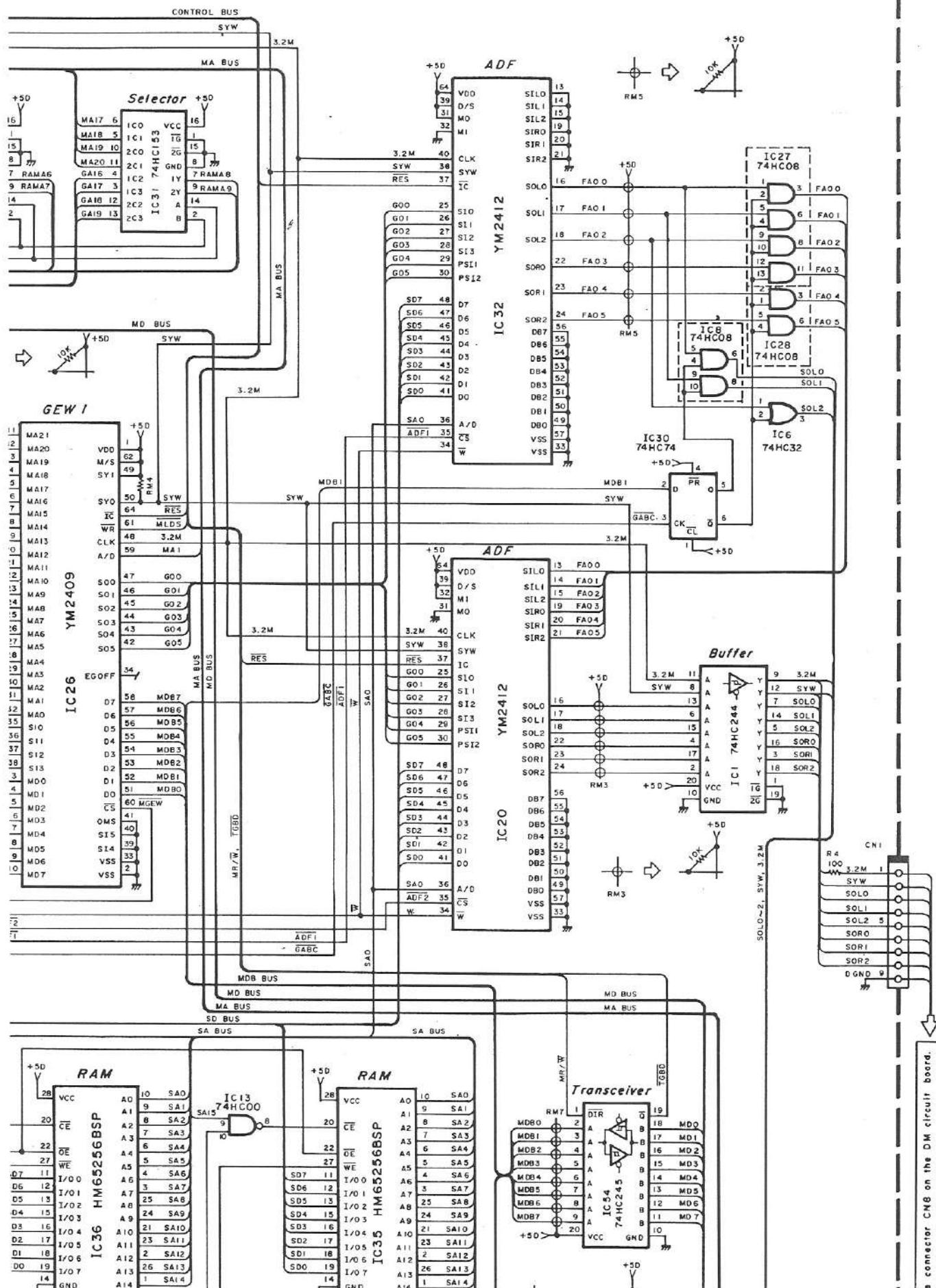
Q

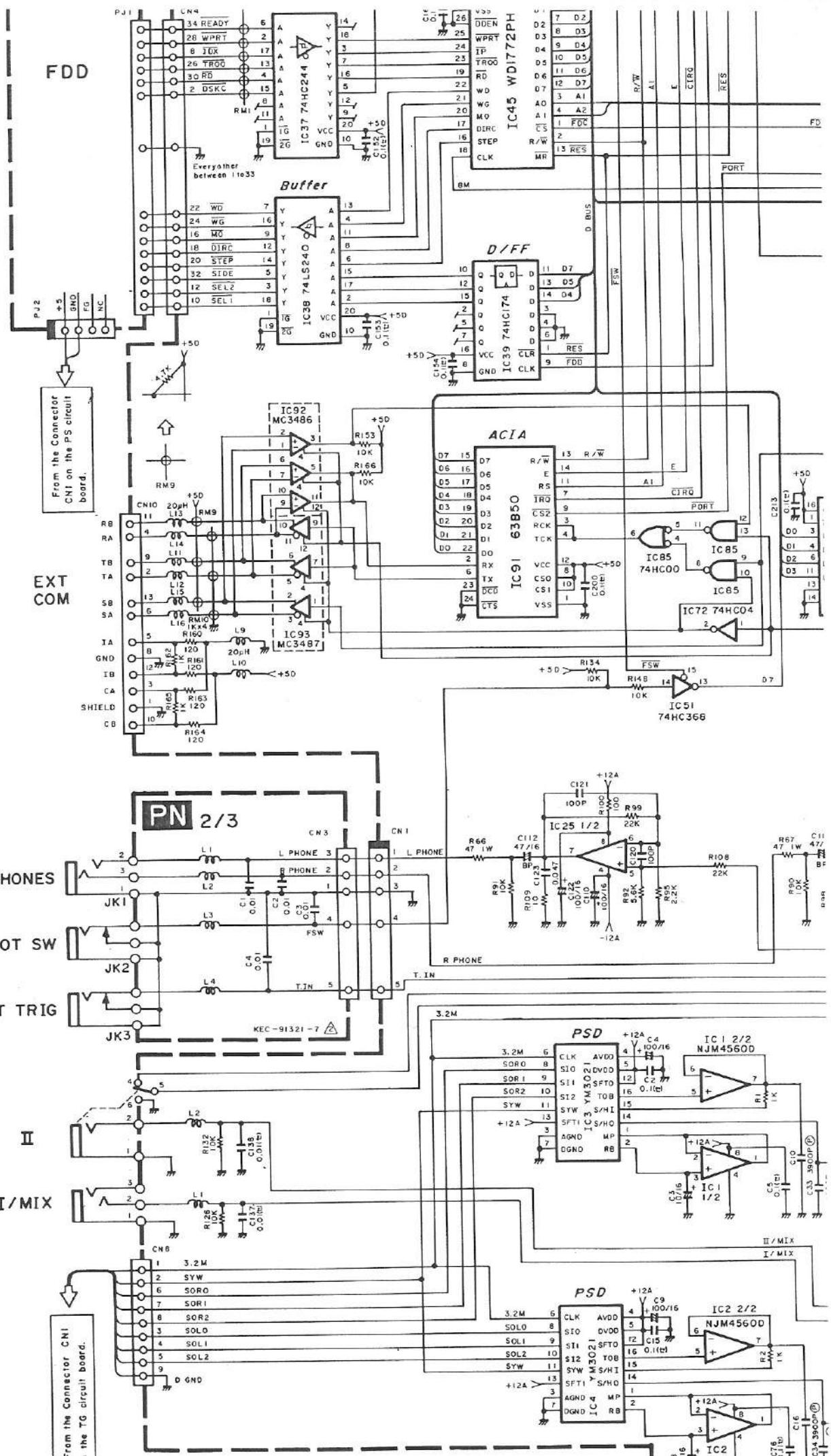
R

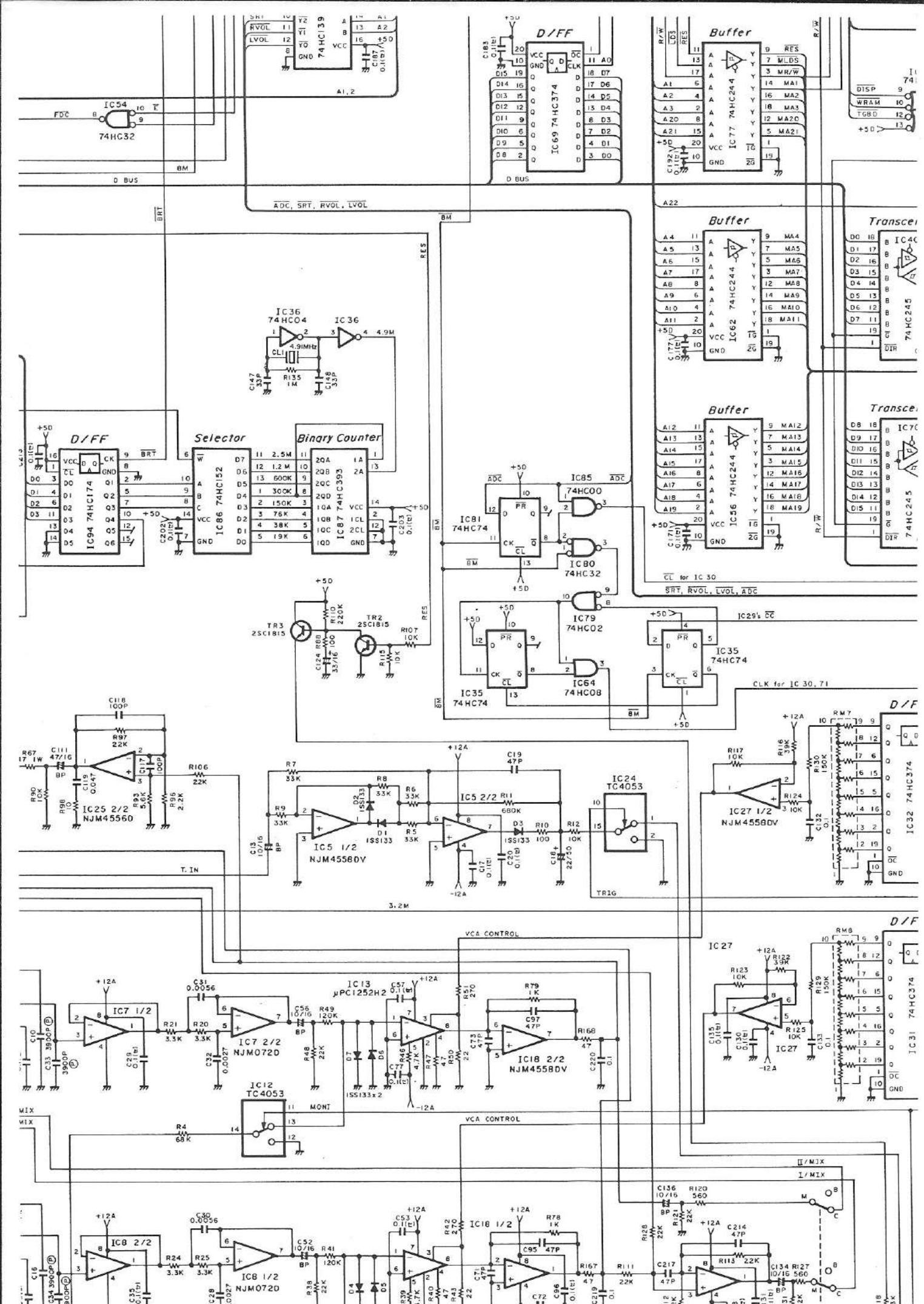
S

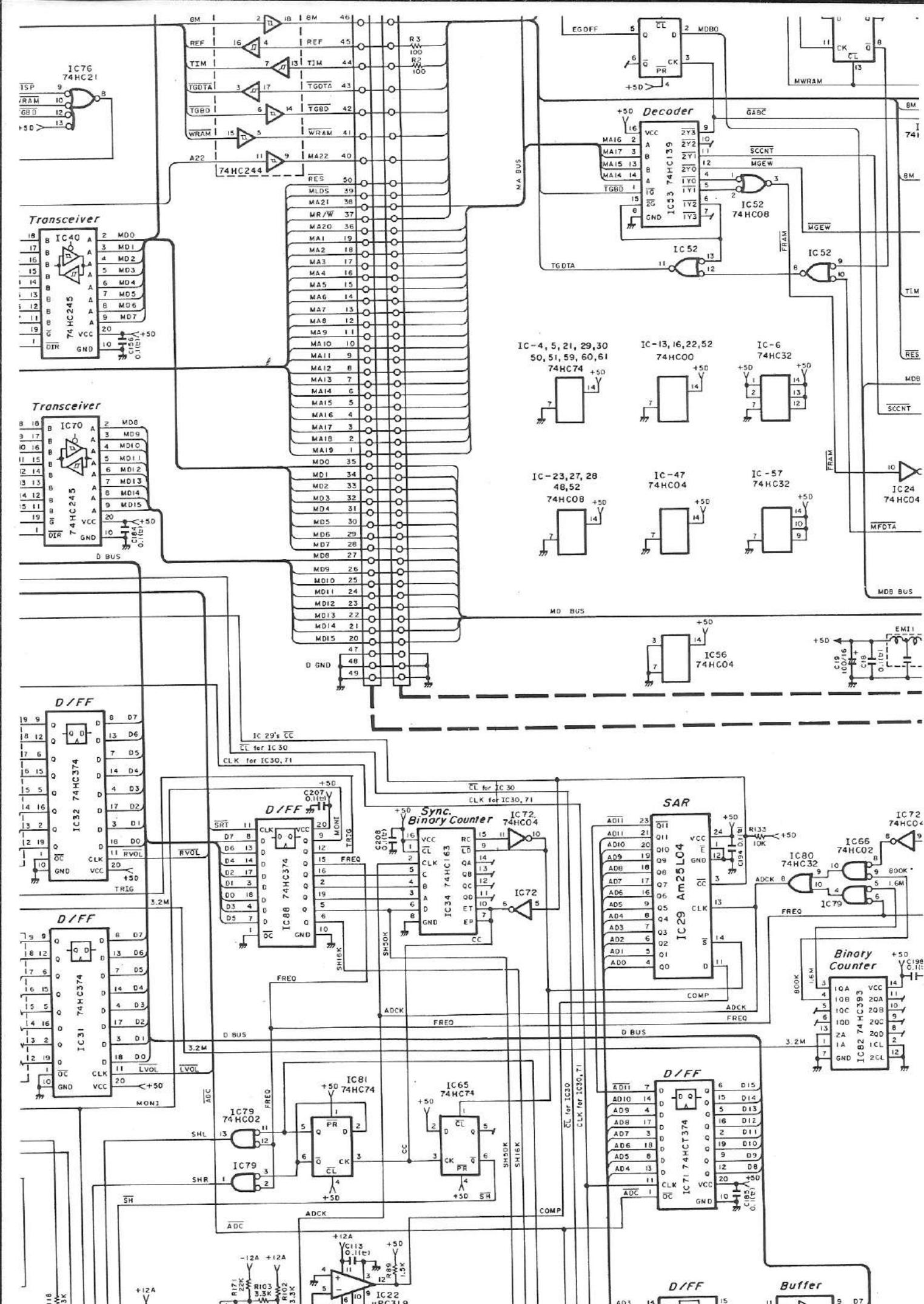
T

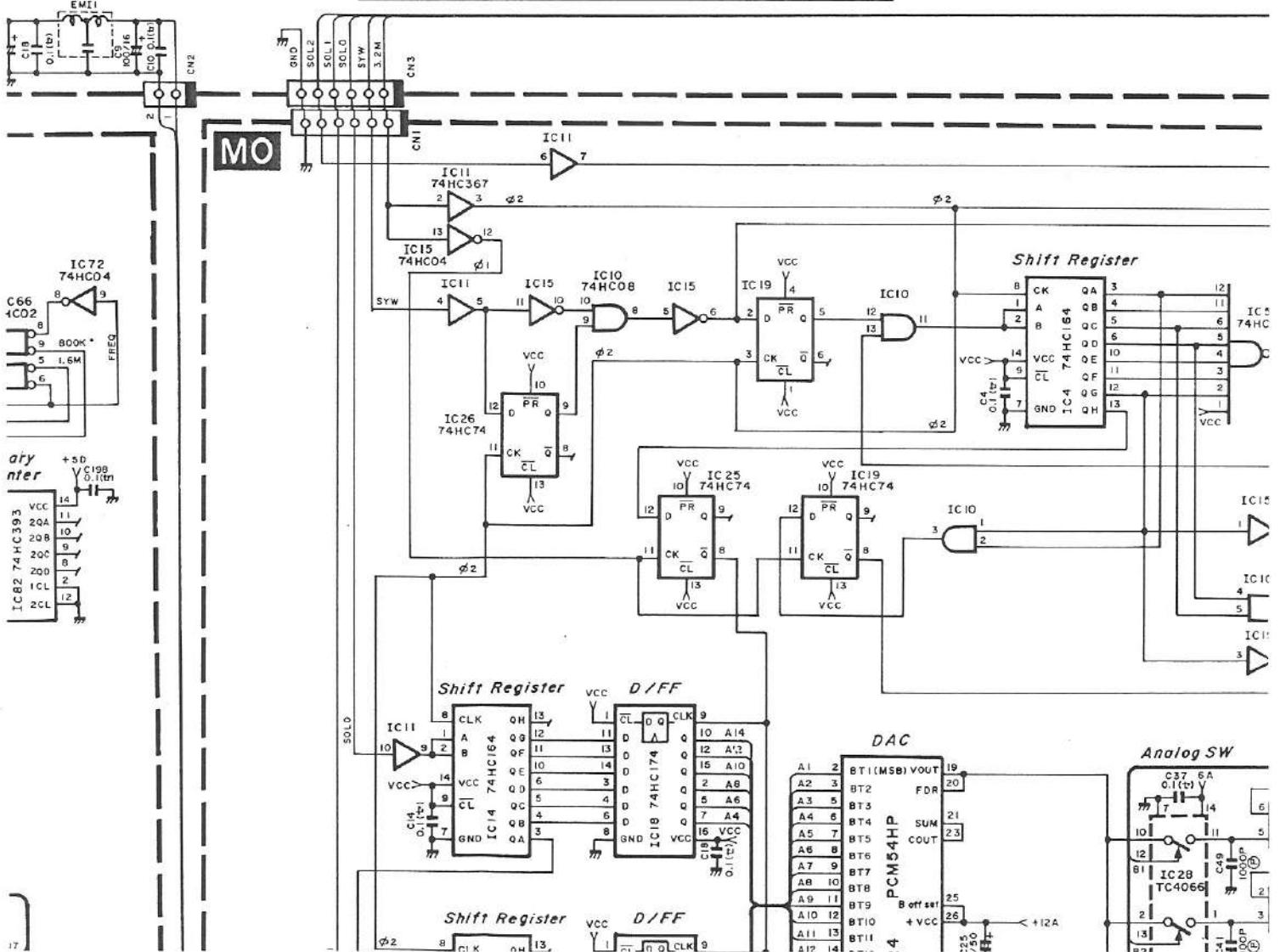
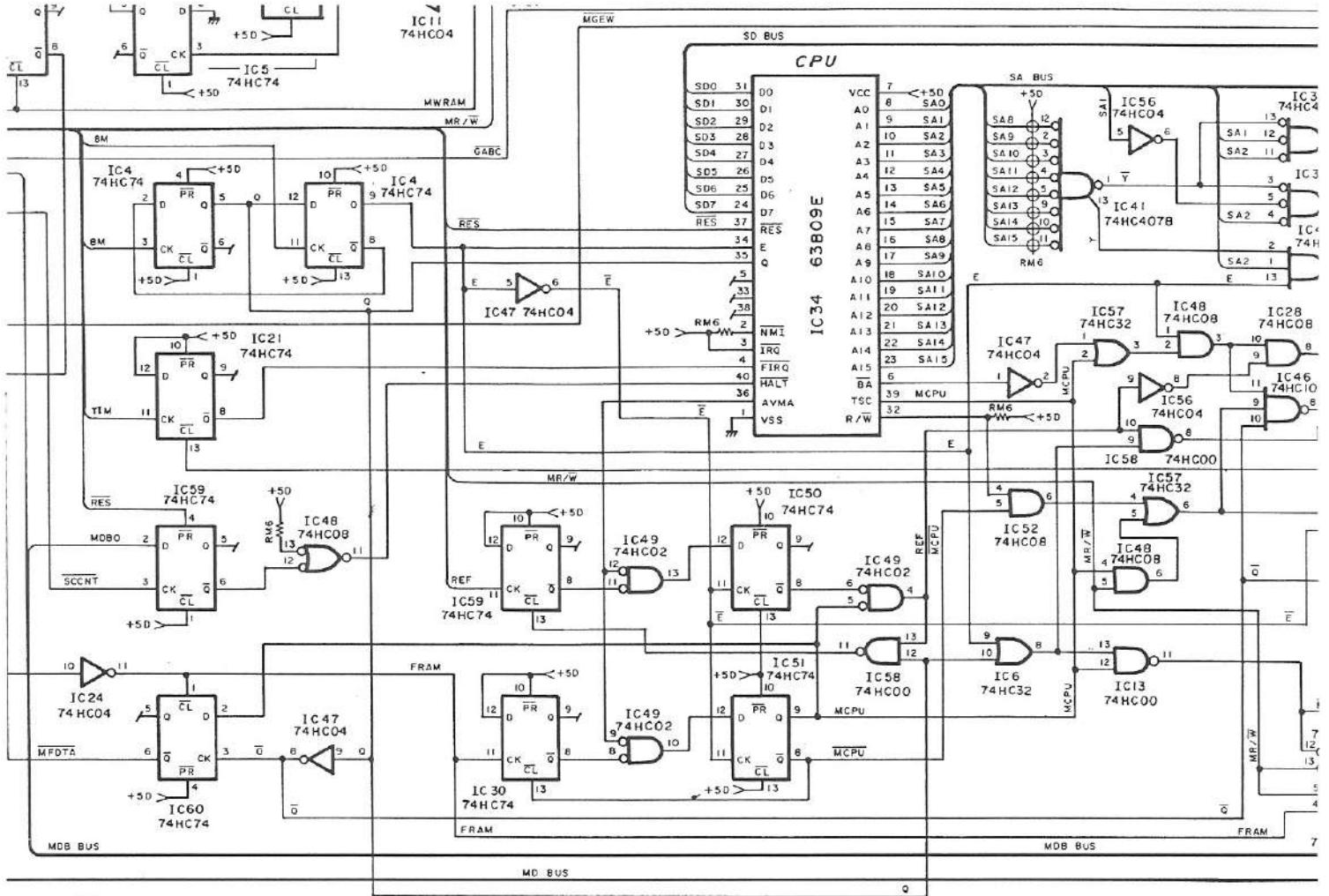
TX16W

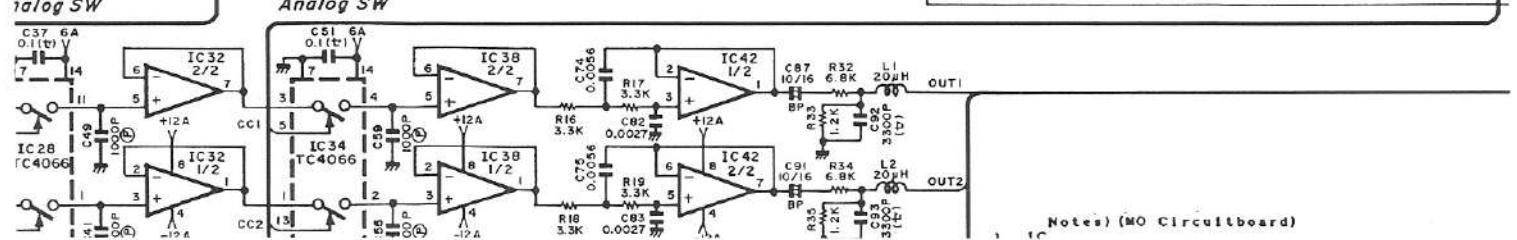
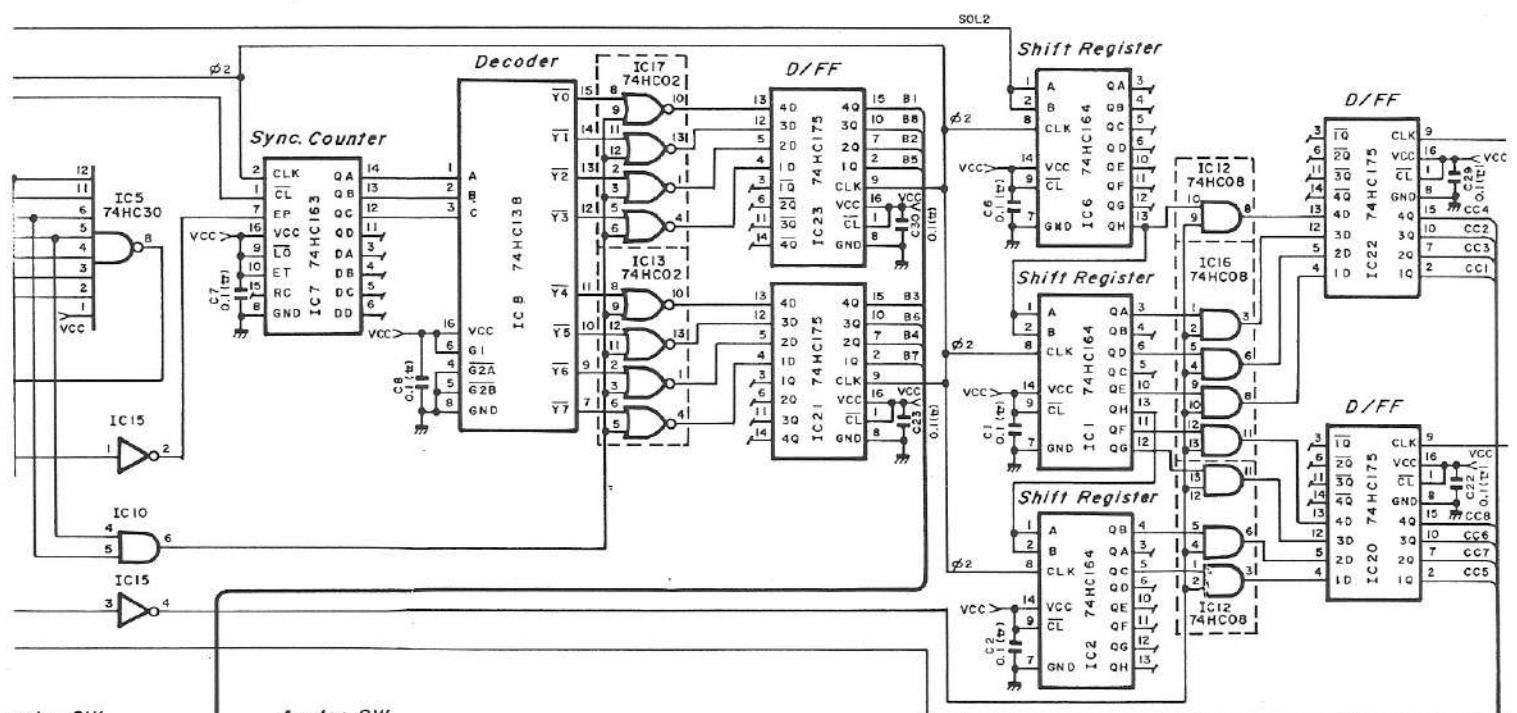
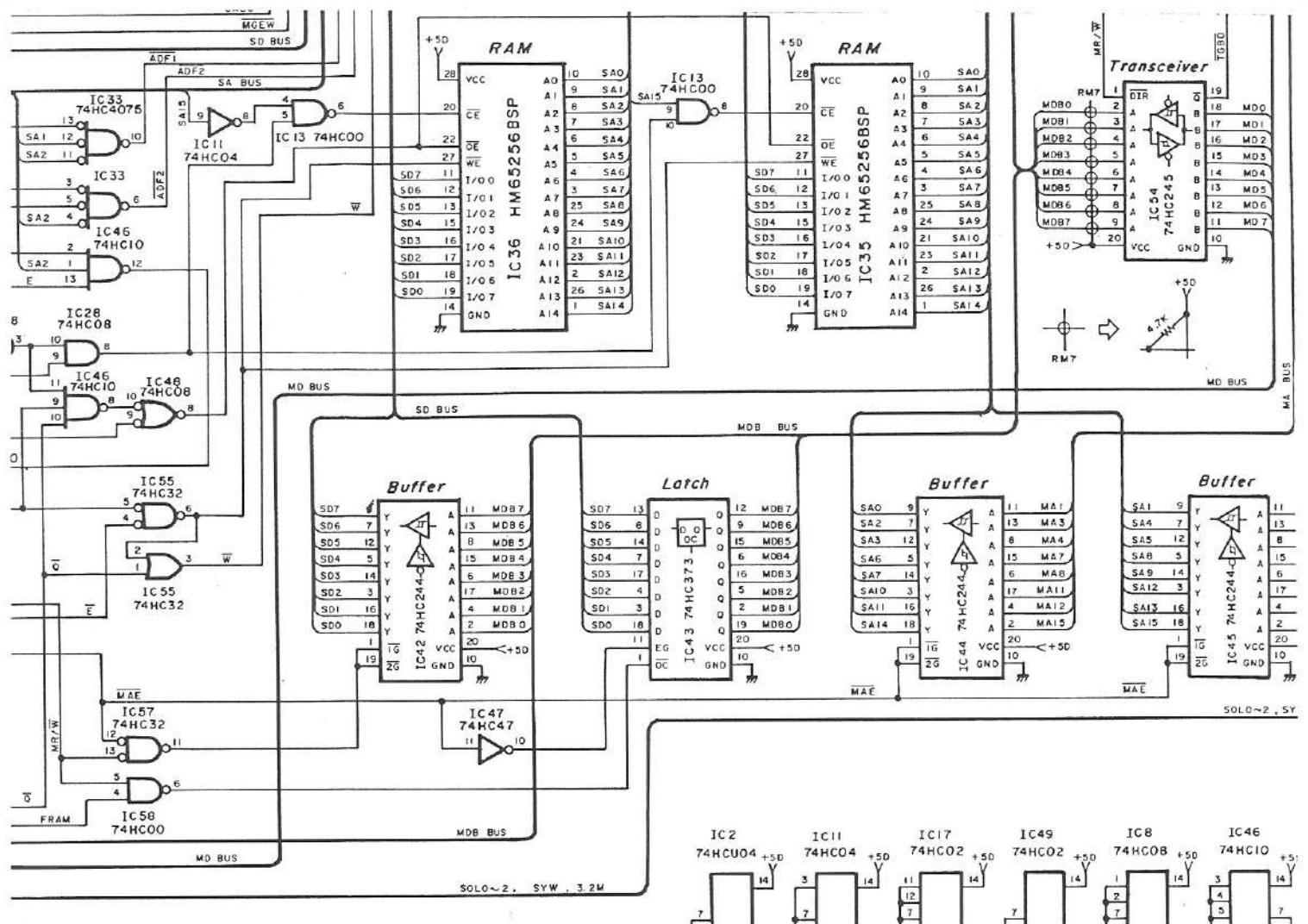


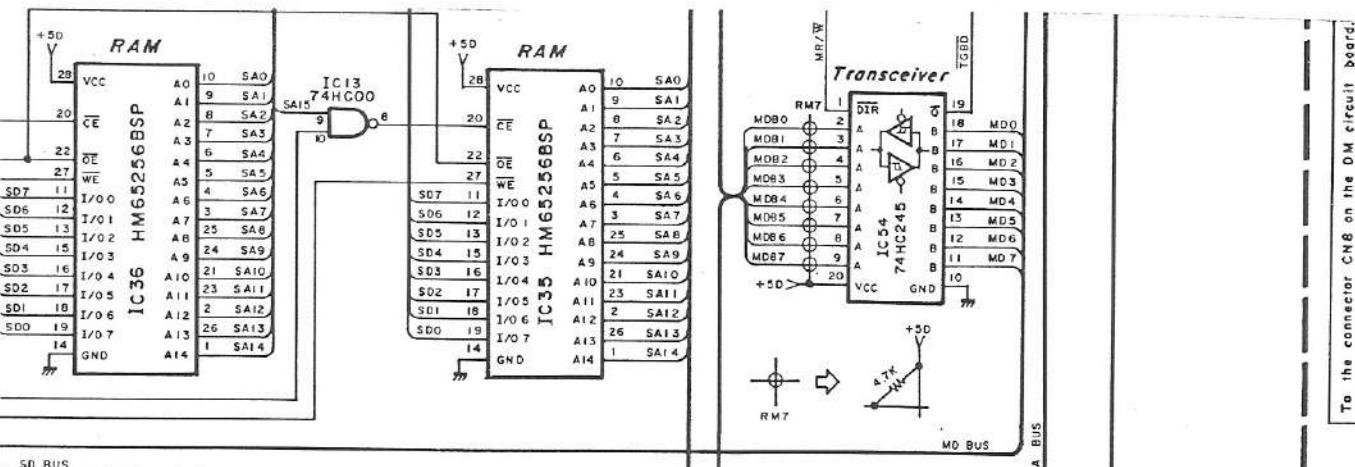




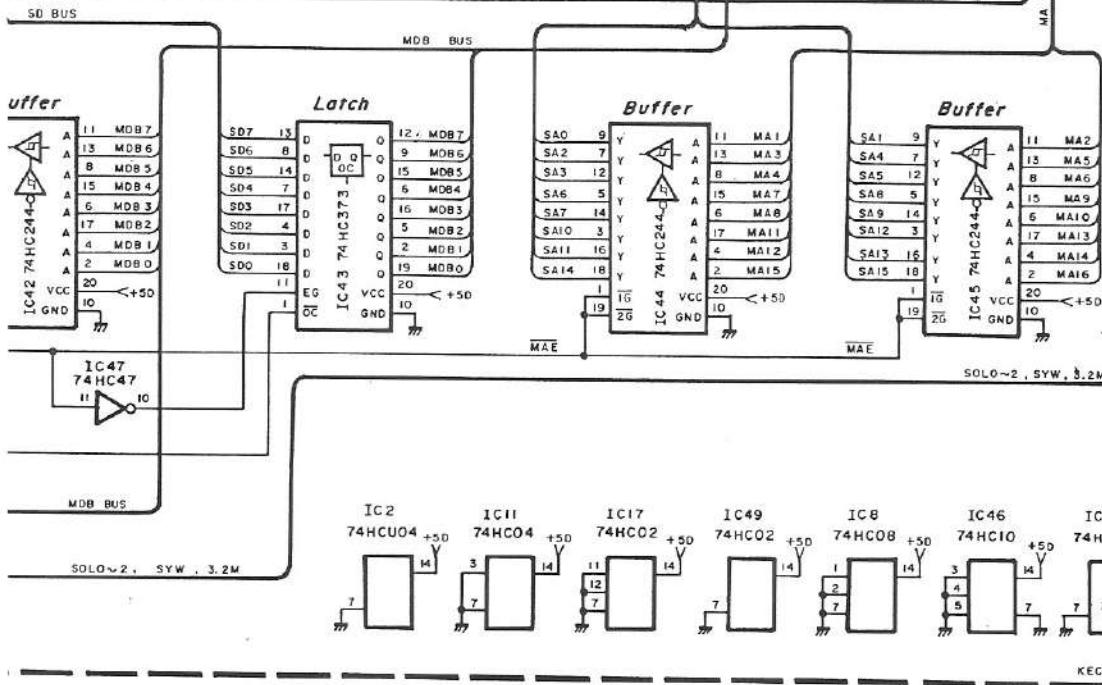




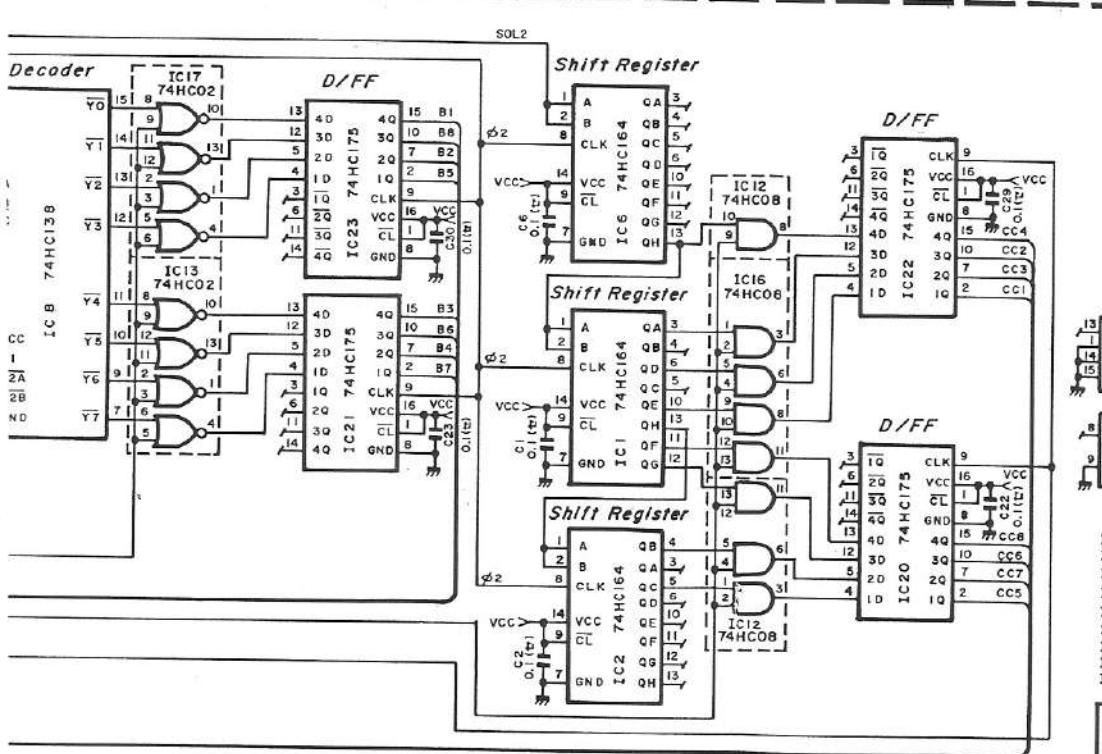




To the connector CN8 on the DM circuit board.

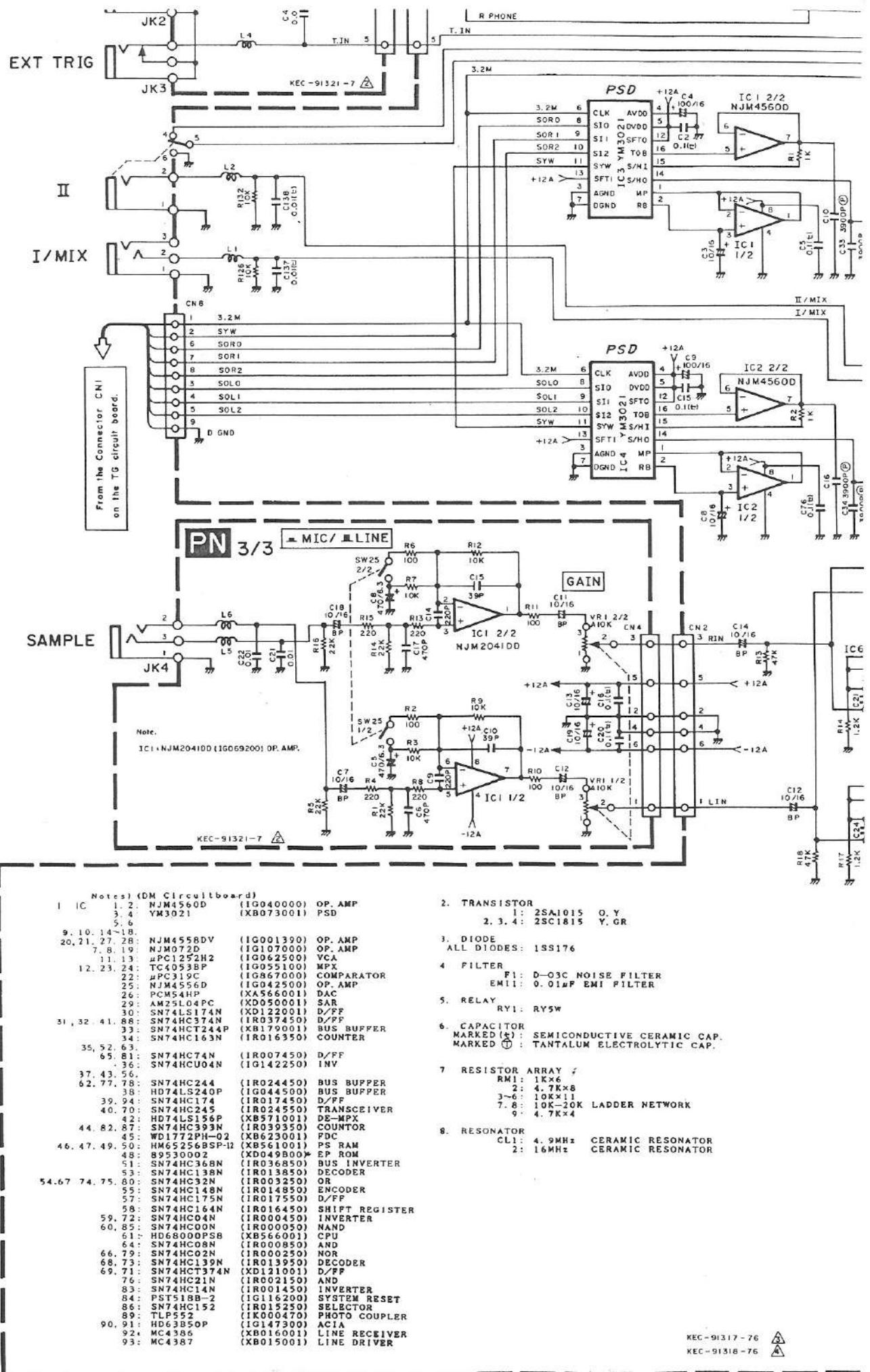


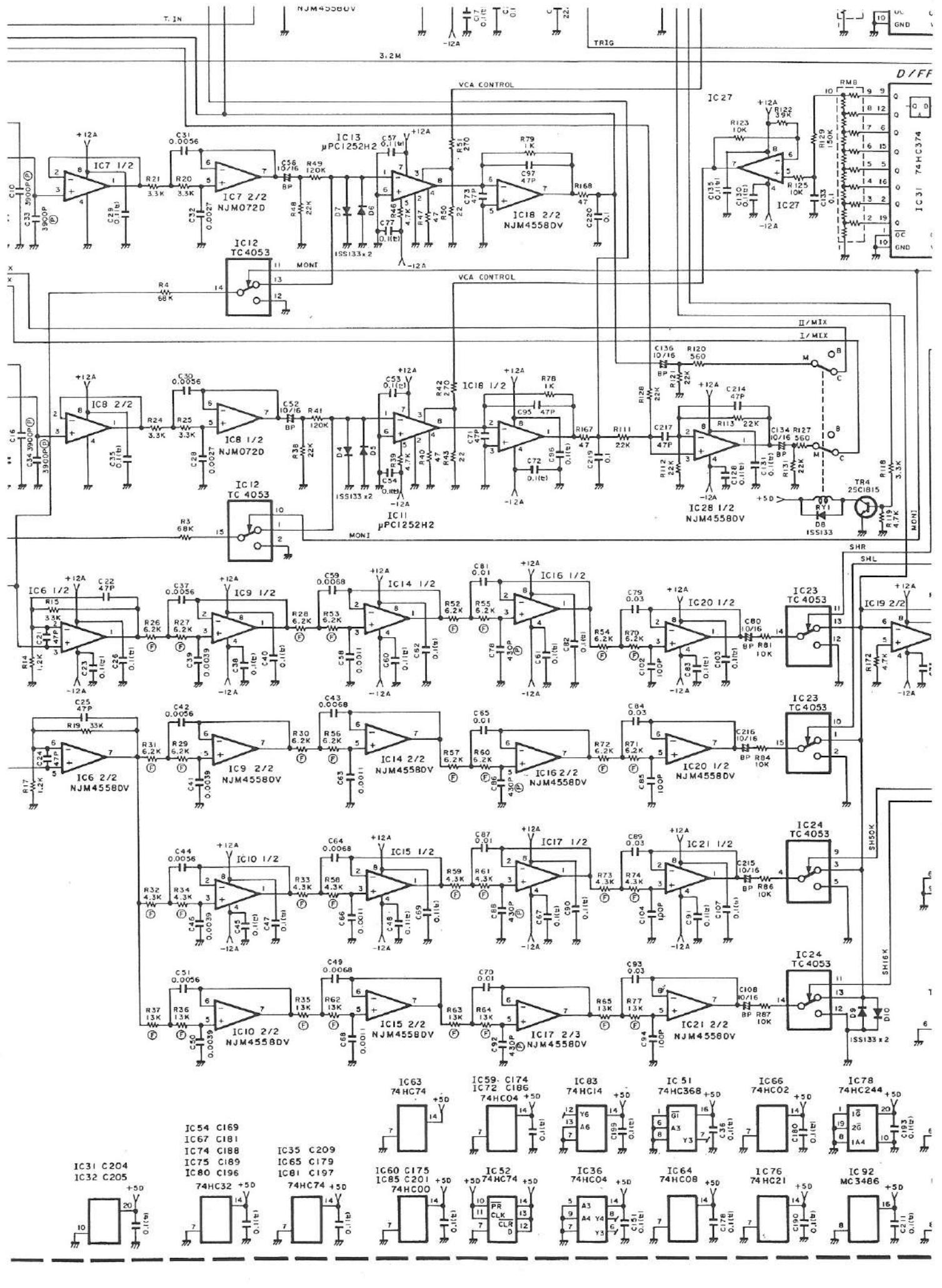
KCC-91319-76

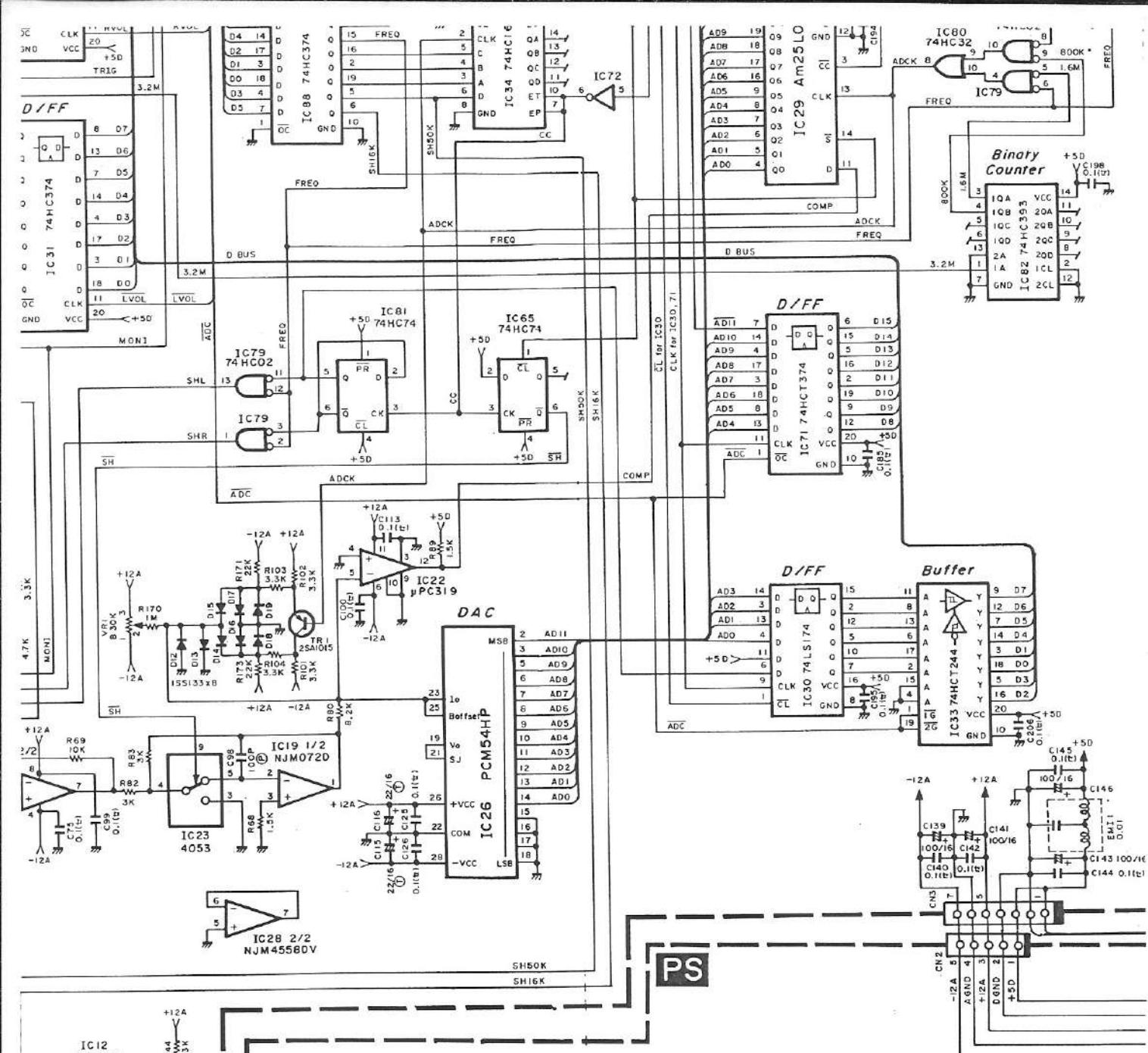


IC 5	C5
IC10	C10
IC12	C12
IC13	C13
IC16	C16
IC17	C17
IC19	C19
IC25	C26
IC26	C31 VCC

INDIVIDUAL
OUT 1
OUT 2

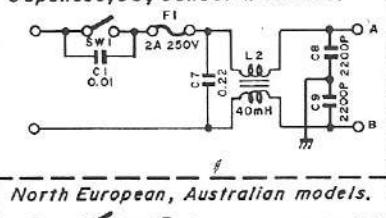




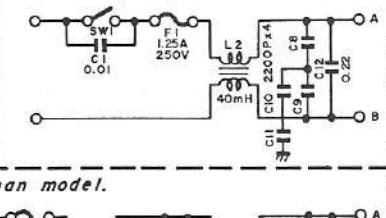


Notes! (PS Circuitboard)
IC
 1: μPC7812H (1G003250) REGULATOR +12VIA
 2: μ7912H (1G038050) REGULATOR +12VA
PHOTO COUPLER
 PCl: PC817 (1K0004B0) (Japanese, US, Canadian Models)
 PC511 (1K000490) (North European, West German Models)
TRANSISTOR
 'TR1': 2SC2655 O.Y.
 2: 2SC3153
 3: 2SC2634 R.S.T
DIODE
 D1: S2VB60
 2: ERB4302
 4: ERB4406
 4~6: 1SD501
 8, 9: ERB4402
 10: C6P04Q
 ZD1: RD6, 2EB2
RESISTOR
 MARKED METAL OXIDE FILM RESISTOR
 MARKED FLAME PROOF CARBON RESISTOR
JUMPER WIRE
 J1: Used Japanese, US, Canadian Models only

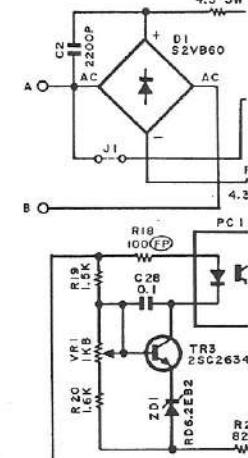
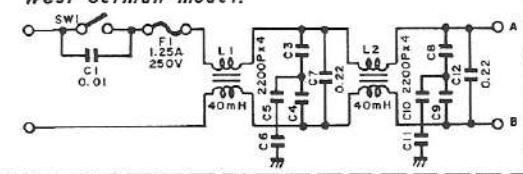
Japanese-US-Fanggian models.

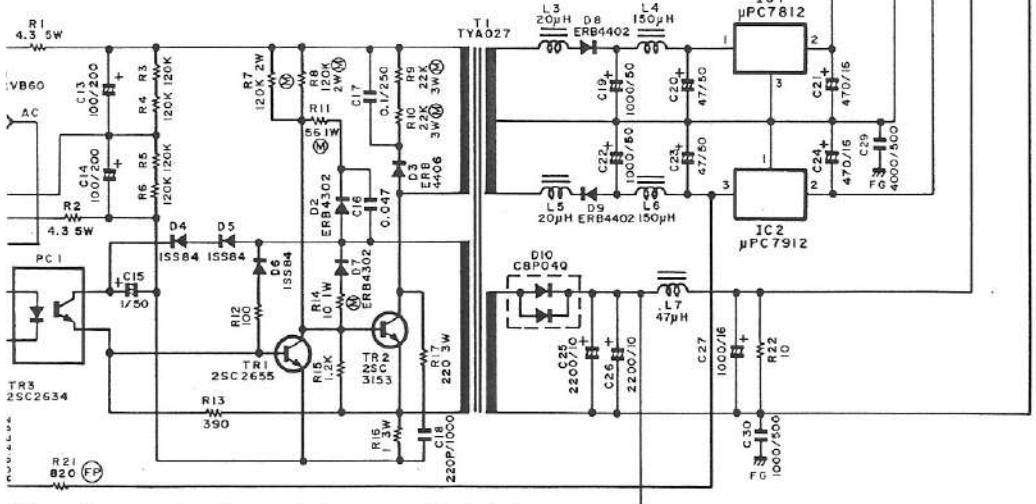
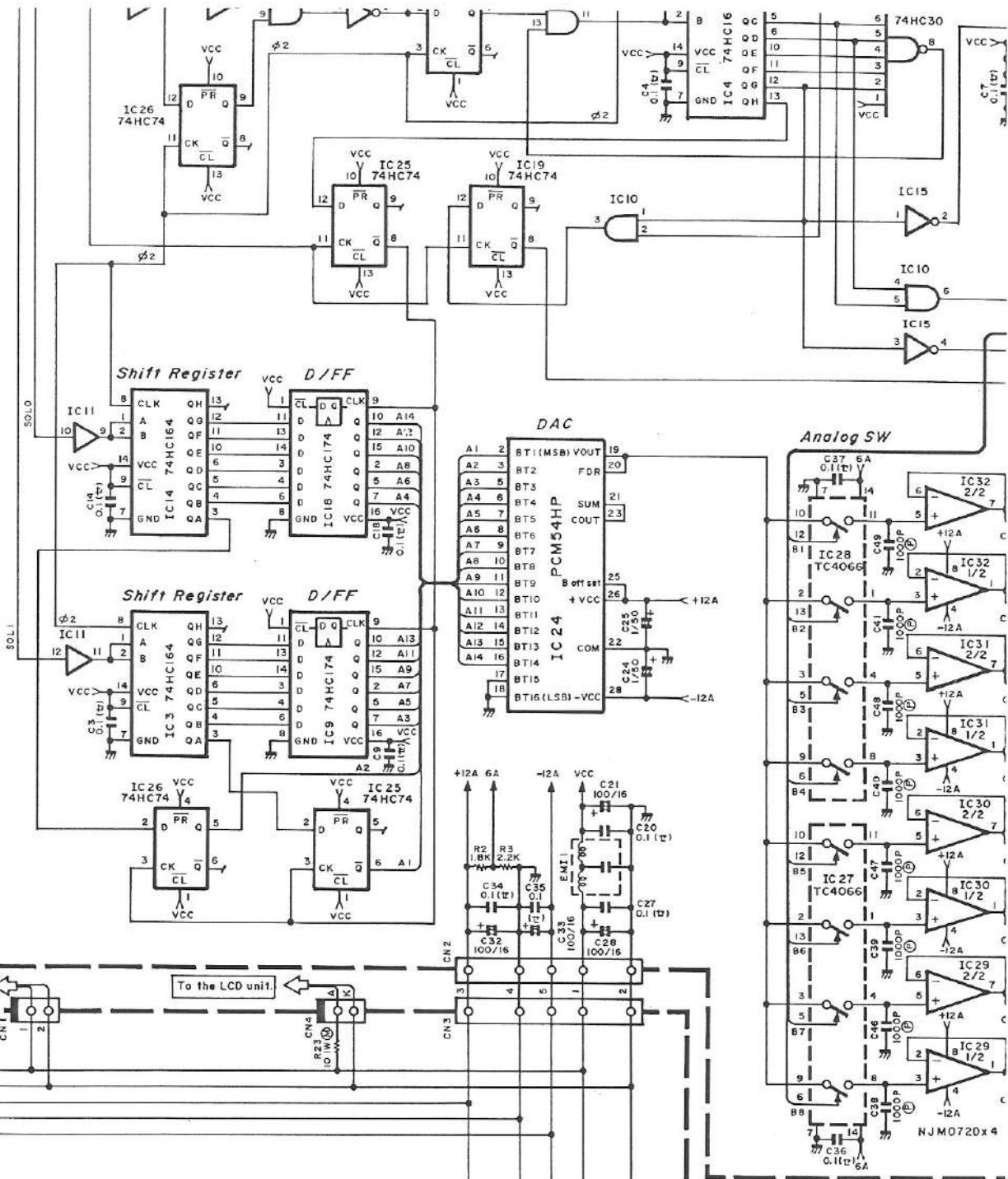


North European, Australian model

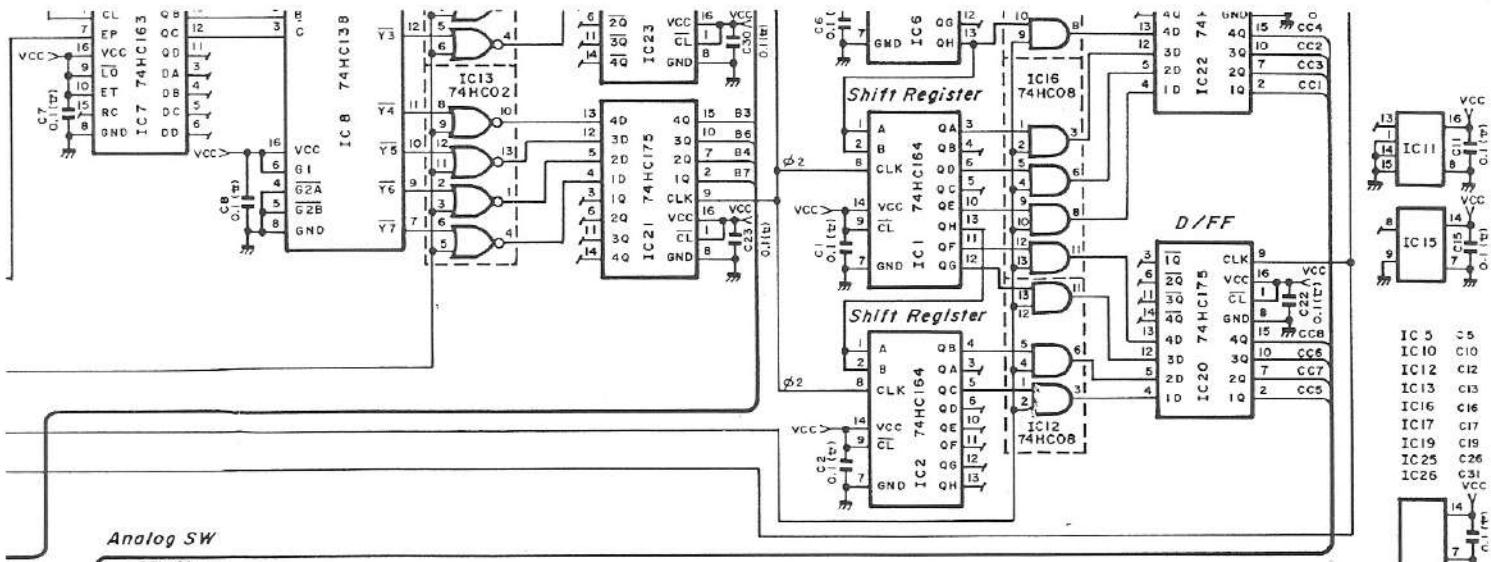


West German model

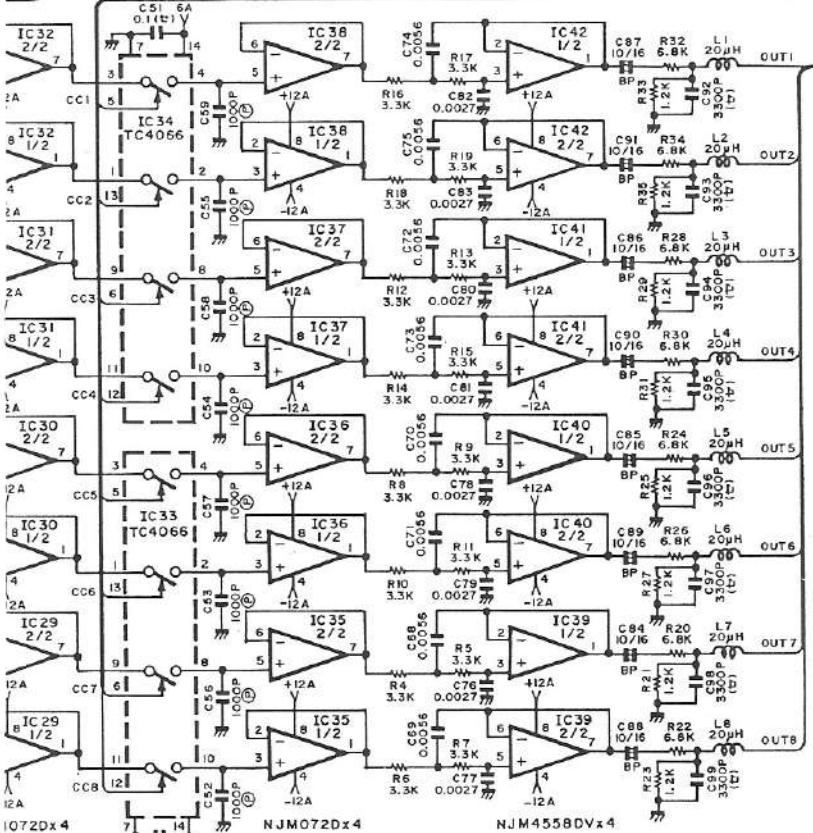




Notes! (TG Circuitboard)			
1.	IC		
	1. 38, 39,		
42.	44, 45;	SN74HC244N	(IR024)
		SN74HC04N	(IG142)
		SN74HC19AN	(IR015)
4, 5, 21,	29, 30,		
50.	59, 61;	SN74HC74N	(IR007)
	6, 55, 57;	SN74HC32N	(IR003)
7,	14,		
	25, 31;	SN74HC153N	(IR015)
8,	23, 27,		
28, 48, 52;	SN74HC08N	(IR000)	
	9,	SN74HC390N	(IR035)
	10;	SN74HC161N	(IR016)
11, 16,	57;	SN74HC04N	(IR000)
	12;	SN74HC107N	(IR010)
13,	16, 22,	SN74HC00N	(IR000)
	58;	SN74HC393N	(IR035)
	17,	SN74HC02N	(IR001)
	18;	SN74HC158N	(IR011)
	20, 32;	YM2412	(XB056)
24,	53;	SN74HC159N	(IR011)
	26;	YM2409	(XB021)
	33;	TC74HC4075	(IR407)
	34;	HD6390BEP	(XB231)
35,	36;	HM65256BSP-12	(XB561)
37,	40;	SN74HC573N	(IR037)
	41;	TC74HC4078P	(IR407)
	43;	SN74HC573N	(D115)
	46;	SN74HC10N	(IR001)
	54;	SN74HC245N	(IR024)



Analog SW

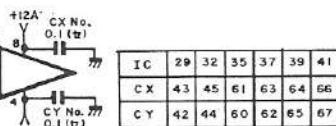


Notes) (NO Circuitboard)

1. IC
1-4, 6, 14: SN74HC164N (IR016450) SHIFT REGISTER
5: SN74HC163N (IR003050) NAND
7: SN74HC163H (IR016350) COUNTER
8: SN74HC138N (IR013650) DECODER
9, 18: SN74HC174N (IR017450) D/FF
10, 12, 16: SN74HC08N (IR000850) AND
11: SN74HC367N (IR036750) BUS DRIVER
13, 17: SN74HC02N (IR000250) NOR
15: SN74HC04N (IR000450) INVERTER
19, 25, 26: SN74HC74N (IR007450) D/FF
20-23: SN74HC175N (IR017550) D/FF
27, 28, 33, 34: TC4066BP (XA566001) DAC
29-35, 35-38: NJM072D (IG001270) ANALOG SW
39-42: NJM4558DV (IG001390) OP. AMP

2. FILTER
EM11: 0.01 EMI FILTER

3. CAPACITOR
MARKED (t): SEMICONDUCTIVE CERAMIC CAP.



KEC-91320-73

ward)

(IR024450) BUS BUFFER
(IC142250) INVERTER
(IR019450) SHIFT REGISTER

(IR007450) D/FF
(IR003250) OR

(IR015350) SELECTOR

(IR000850) AND
(IR39020) DECODE COUNTER
(IR16120) SYNC COUNTER
(IR00050) INVERTER

(IR010750) JK FF
(IR00050) NOR
(IR039350) BINARY COUNTER

(IR000250) NOR
(IR015850) SELECTOR
(XB056001) ADF

(IR013950) DECODER
(XB022001) GEW1

(IR407500) OR
(XB233031) CPU

(XB561001) PS RAM
(IR037350) D-LATCH

P (IR407800) OR/NOR
N (XD119001) D-LATCH

(IR001050) NAND
(IR024550) TRANSCIEVER

2. RESONATOR

CRI: QUARTZ CRYSTAL UNIT 12.8MHz

3. CAPACITOR

MARKED (t): SEMICONDUCTIVE CERAMIC CAP.

4. RESISTOR ARRAY

RML: 4.7Kx4
2, 4: 10Kx12
3, 5: 10Kx6
6: 10Kx12
7: 4.7Kx8

5. PASS CON

+5V
C3~8
0.1(t)
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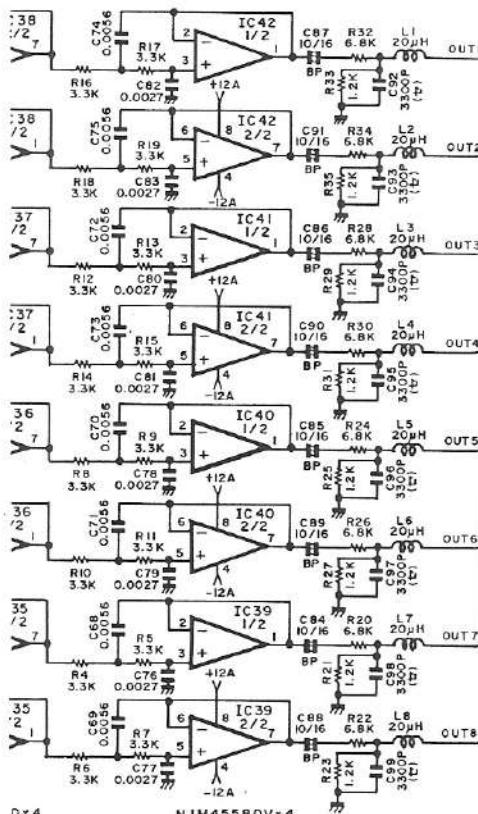
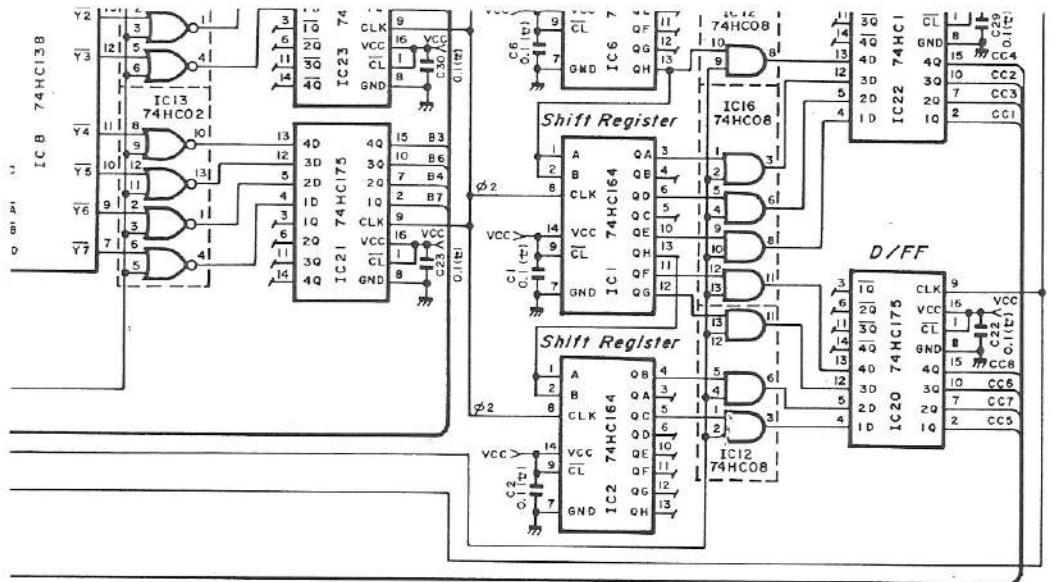
11~17
20~43

11~17
20~43

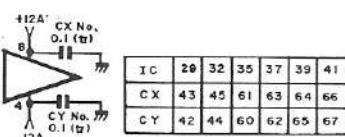
11~17
20~43

11~17
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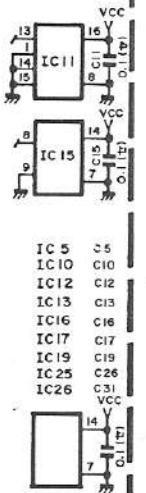
11~17
20~43</p



- Notes (NO Circuitboard)**
- IC**
1~4, 6, 14: SN74HC164N (IR016450) SHIFT REGISTER
5: SN74HC30N (IR003050) NAND
7: SN74HC163N (IR016350) COUNTER
8: SN74HC138N (IR013850) DECODER
9, 18: SN74HC174N (IR017450) D/FF
10, 12, 16: SN74HC08N (IR000850) AND
11: SN74HC367N (IR036750) BUS DRIVER
13, 17: SN74HC02N (IR000250) NOR
15: SN74HC04N (IR000450) INVERTER
19, 25, 26: SN74HC74N (IR007450) D/FF
20~23: SN74HC175N (IR017550) D/FF
24: PCM54HP (XA566001) DAC
27, 28, 33, 34: TC4066BP (IG001270) ANALOG SW
29~35, 35~38: NJM072D (IG107000) OP. AMP
39~42: NJM4558DV (IG001390) OP. AMP
 - FILTER**
EMI: 0.01 EMI FILTER
 - CAPACITOR**
MARKED (e): SEMICONDUCTIVE CERAMIC CAP.



IC	29	32	35	37	39	41
CX	43	45	61	63	64	66
CY	42	44	60	62	65	67



KEC-91320-73

2. RESONATOR
CR1: QUARTZ CRYSTAL UNIT 12.8MHz

3. CAPACITOR
MARKED (e): SEMICONDUCTIVE CERAMIC CAP.

4. RESISTOR ARRAY
RM1: 4.7Kx4
2, 4: 10Kx12
3, 6: 10Kx6
5, 7: 10Kx12
7: 4.7Kx8

5. PASS CON
+50V
C3-8
11~17
20~43

TX16W