

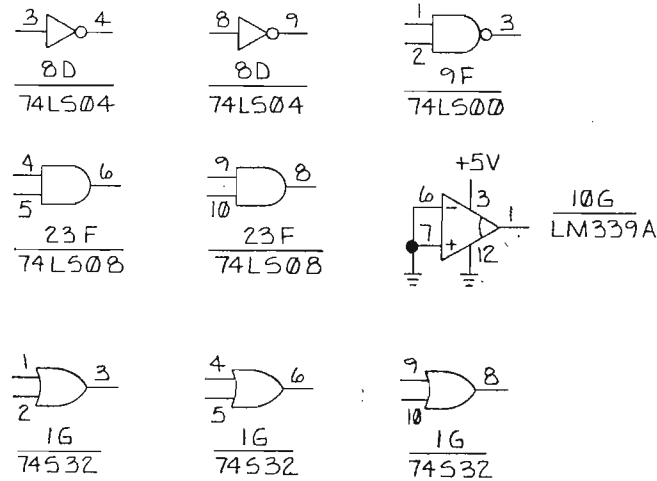
NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL RESISTANCE VALUES ARE IN OHMS, $\pm 5\%$, 1/4W.
2. ALL CAPACITANCE VALUES ARE IN UF, $+80/-20\%$.
3. THE FOLLOWING CHART DENOTES I.C. LOCATIONS, TYPES AND POWER/GROUND PINS.

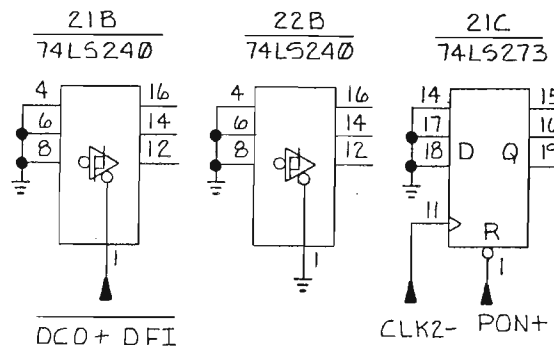
LOCATION	TYPE	VCC (+5V)	GND	-VCC (-5V)
16F, 17F	7416	14	7	
3A	AM2910DC	10	30	
19G	75107A	14	7	13
20G	75110	14	7	11
8E, 8F	74500	14	7	
5F	74504	14	7	
16C, 9E	74574	14	7	
20D, 7F	74502	14	7	
13B, 11C-13C	745138	16	8	
7B, 11B	745157	16	8	
5E	74586	14	7	
3F	745175	16	8	
1G	74532	14	7	
6G	74LS157	16	8	
6F	74510	14	7	
20E-24E	745151	16	8	
9D	745112	16	8	
8D, 23D	74LS04	14	7	
8G	745124	16	8,9	
5G	74551	14	7	
7E	745169	16	8	
5D, 23F	74LS08	14	7	
9F, 13G	74LS00	14	7	
19F	74LS02	14	7	
20F	74LS86	14	7	
4F	74LS169A	16	8	
10F	74LS175	16	8	
6D, 7D, 24F, 21G	74LS109	16	8	
12G	74LS151	16	8	
21D, 22D	74LS153	16	8	
1C, 1D, 3D, 10E-12E, 15F, 4G	74LS161A	16	8	
19D	74LS280	14	7	
2C, 21C, 22C, 15E-17E, 2G	74LS273	20	10	
19B-24B, 18F	74LS240	20	10	
2B, 3B, 3C	74LS244	20	10	
10D	745240	20	10	
15C	745244	20	10	
6B, 8B, 10B, 12B, 14B-19B, 18C	745374	20	10	
20C	745373	20	10	
5B	745132	14	7	
4C, 19C, 23C, 24C, 14E, 18E	74LS374	20	10	
7C, 8C	2901B	3	12	

LOCATION	TYPE	VCC (+5V)	GND	VCC (-5V)
6E, 3G	745109	16	8	
1E, 13F, 11G, 14G, 15G	74LS194	16	8	
5C, 4D, 3E, 4E, 14F, 21F, 22F	74LS323	20	10	
11D-18D	2125H-2	16	8	
7G	MC 4044P	14	7	
10G	LM339A	3	12	

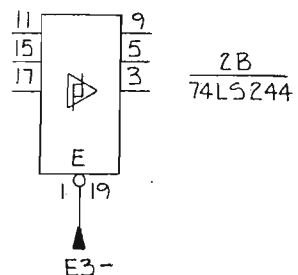
4. THE FOLLOWING ARE SPARE GATES:



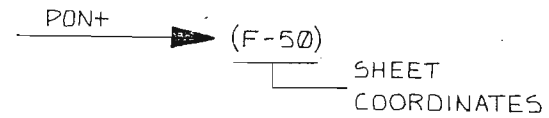
5. THE FIVE REMAINING ELEMENTS IN EACH OF THE FOLLOWING CHIPS ARE SHOWN IN USE ON PAGE 5.



6. THE FIVE REMAINING ELEMENTS IN THE FOLLOWING CHIP ARE SHOWN IN USE ON PAGE 7.



7. SEE SHEET 2 FOR FUNCTIONAL BLOCK DIAGRAM.
8. SEE SHEET 7 FOR DECOUPLING DIAGRAM.
9. SHEET TO SHEET CROSS REFERENCES ARE NOTED AS FOLLOWS:



10. A 1K RESISTOR MAY BE TEMPORARILY INSTALLED IN THE W1 JUMPER POSITION (F-57) DURING DEBUG WHILE THERE IS NO PPU OR PPU EMULATOR CONNECTED TO J3.
11. INDICATED POSITION IS FOR FUTURE USE IF A CAPACITOR IS REQUIRED.
12. INDICATED POSITION IS FOR FUTURE USE IF A RESISTOR IS REQUIRED.
13. INSTALL JUMPER W2 (C-33) AS FOLLOWS: IN THE 2K POSITION FOR 2K OF CONTROL STORE OR IN THE 1K POSITION FOR 1K OF CONTROL STORE.
14. ALL RESISTOR NETWORKS RESISTANCE VALUES ARE $\pm 20\%$.
15. ALL INDUCTOR VALUES ARE $\pm 10\%$.

REF. DES.	LAST USED	NOT USED
C	C23 / C152	C12
CR	CR1	
J	J6	
L	L27	
Q	Q4	
R	R42	R10
RP	RP17	
S	S1	
W	W2	
Y	Y1	

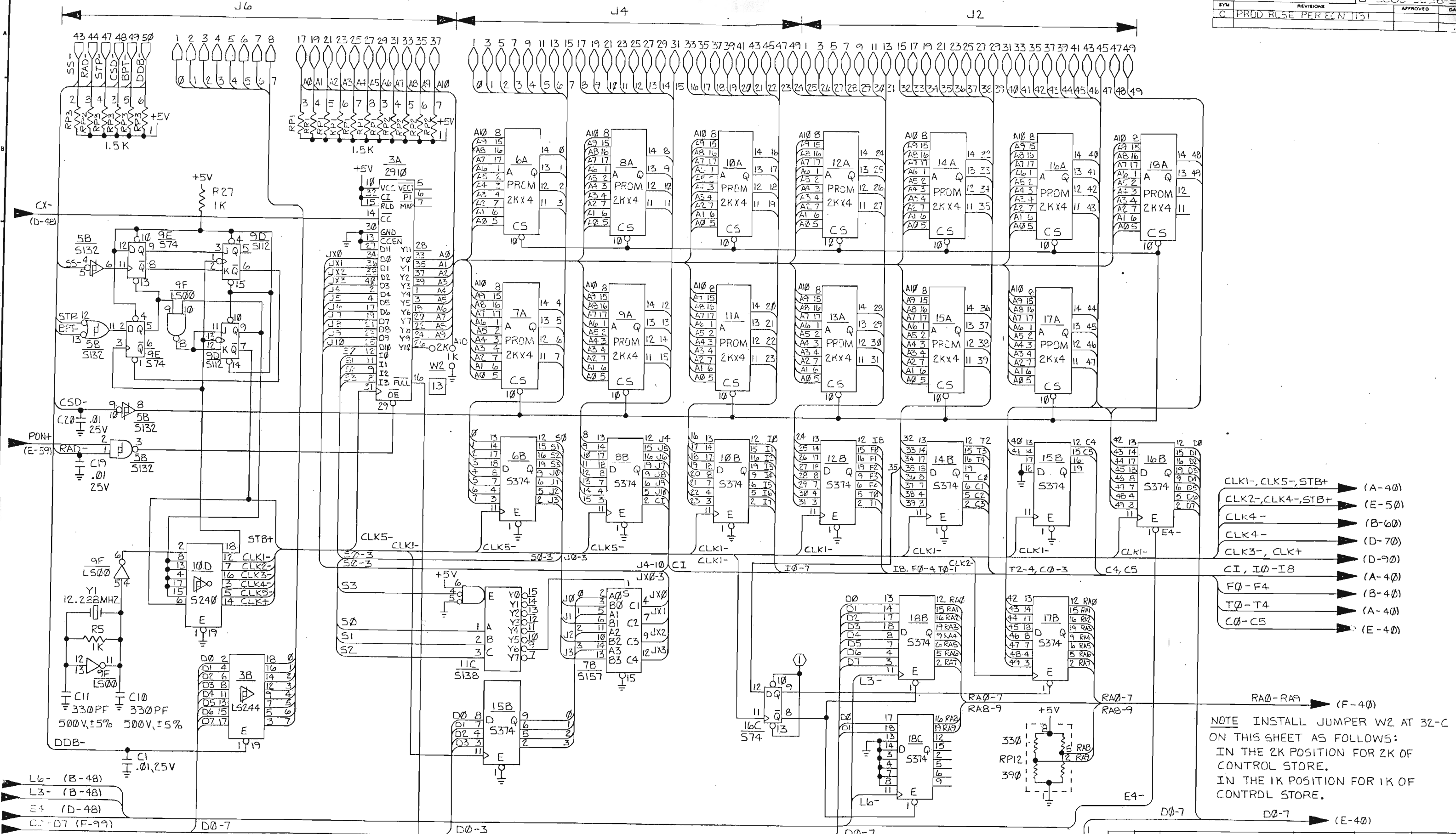
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DO NOT SCALE THIS DRAWING UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 TOLERANCES .XX2 .02 .XXX2 .000

ITEM	QTY.	MATERIAL DESCRIPTION	MAT'L PART NO.	MAT'L DWG. NO.	MAT'L SPEC.
DRAWN BY: <i>D. Milton</i>		DATE: 6-24-81	SCHEMATIC DIAGRAM CARTRIDGE TAPE		
ENGINEER: <i>D. Milton</i>		DATE: 2-3-81	TITLE: CONTROLLER		
RELEASE TO PROD.		SEE WHERE USED LIST NEXT ASSEMBLY	PART NUMBER: 8000-5038		
SUPERSEDES DWG.		FINISH: NONE	SCALE: NONE	D-8000-5038-S	

NOTE GROUND ALL UNSPECIFIED PINS ON J16, J4, J2, EXCEPT J6 PIN 45

SYM	REV	DATE
C	PROD RLSE PER ECN 1151	



NOTE INSTALL JUMPER W2 AT 32-C ON THIS SHEET AS FOLLOWS:
 IN THE 2K POSITION FOR 2K OF CONTROL STORE.
 IN THE 1K POSITION FOR 1K OF CONTROL STORE.

- L6- (B-48)
- L3- (B-48)
- E4 (D-48)
- D0-07 (F-99)

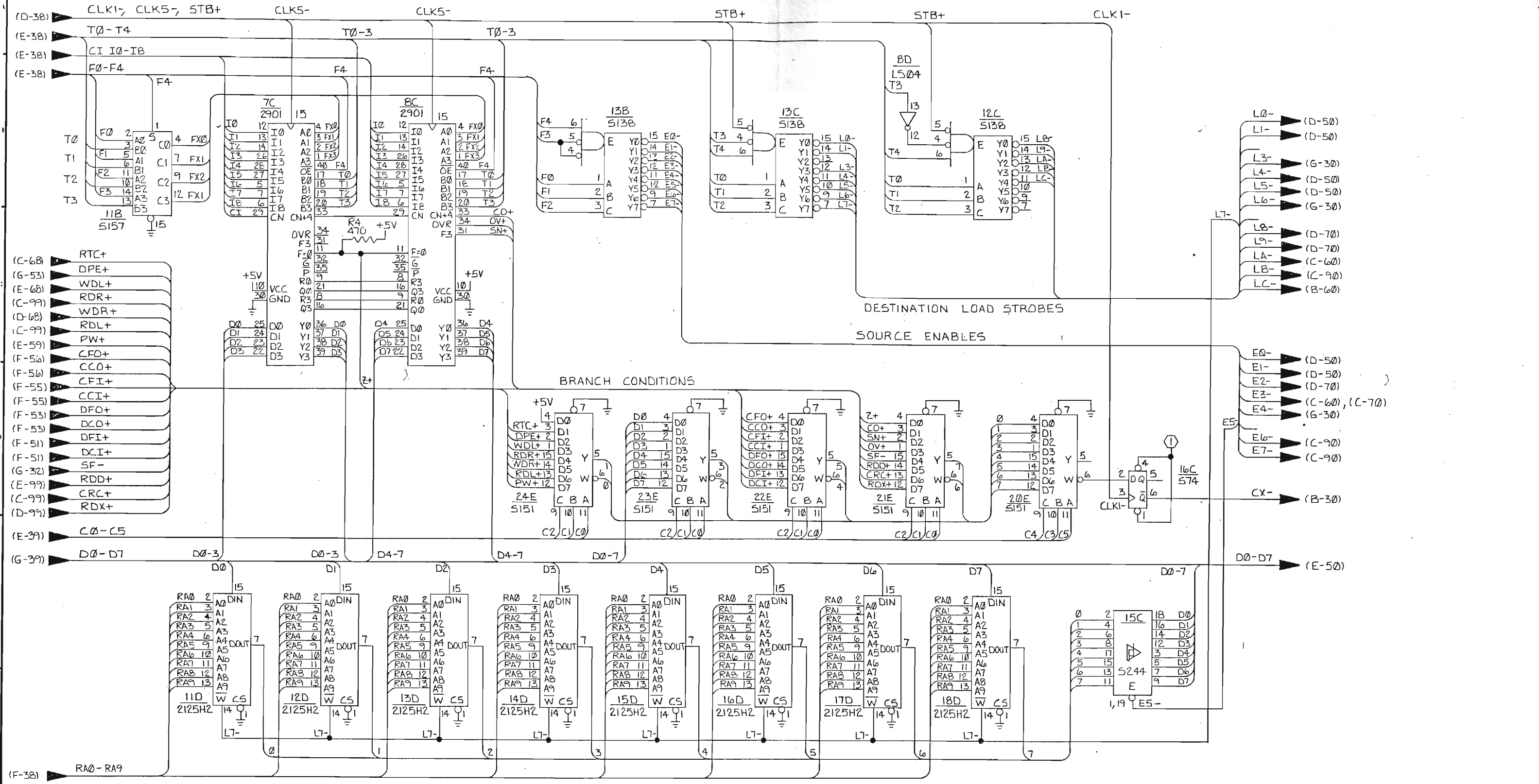
NOTE (1) = R3 +5V
 THIS RESISTOR IS ALSO USED ON SHEET 4.

DEBUGGER INTERFACE, CLOCKS
 CONTROL STORE, RAM ADDRESSING

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 TOLERANCES .XX1 .02 .XXX2 .008

ITEM	QTY	MATERIAL DESCRIPTION	MAT'L PART NO.	MAT'L DWG. NO.	MAT'L SPEC.
DRAWN BY: D. MILTON DATE: 12-3-81					
TITLE: SCHEMATIC DIAGRAM CARTRIDGE TAPE CONTROLLER					
SEE WHERE USED LIST					
PART NUMBER: 8000-5038					
FINISH: NONF					
D-8000-5038-5					

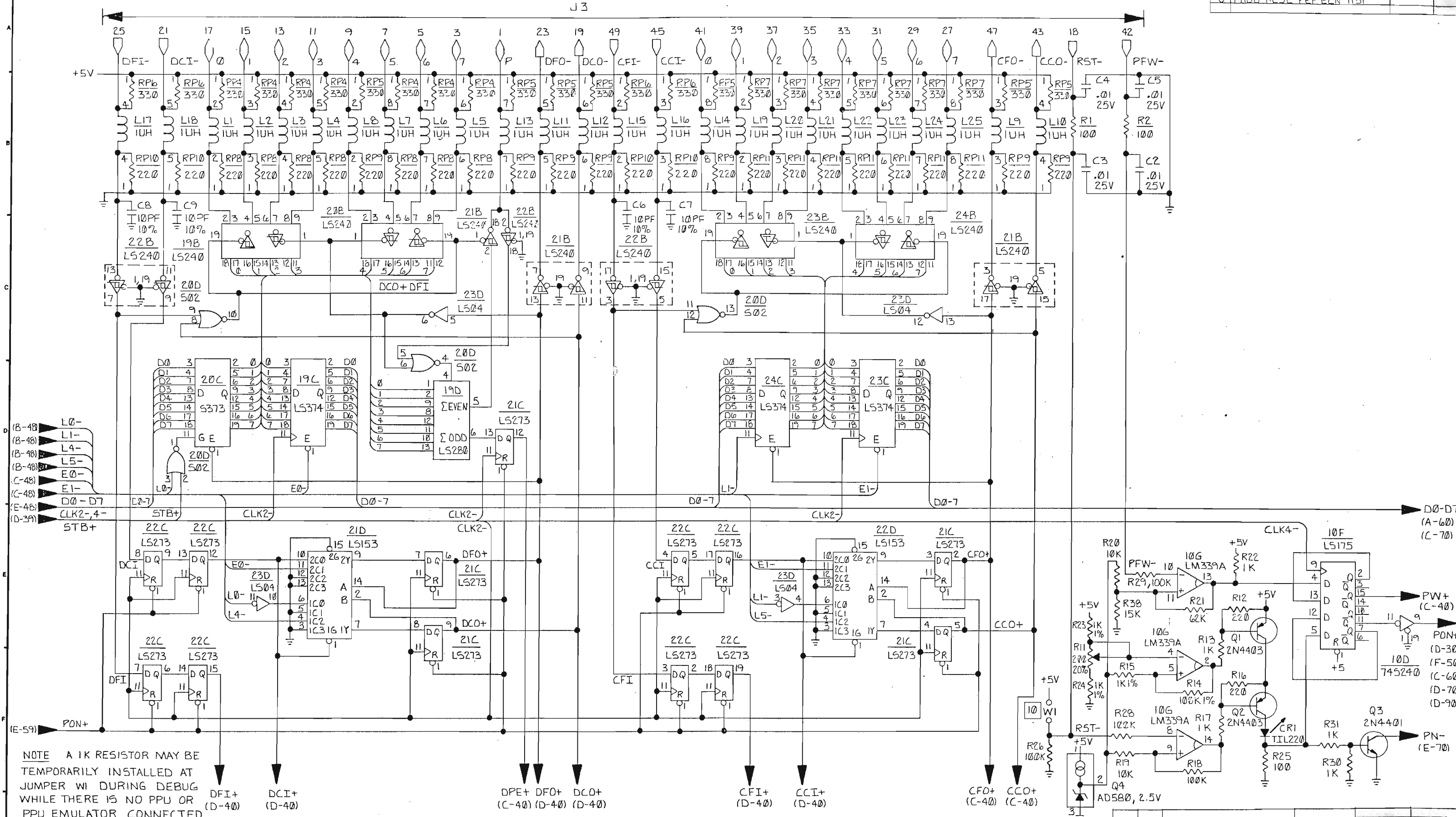


R3 +5V
 1K
 THIS RESISTOR IS ALSO USED ON SHEET 3:

ALU, SOURCE AND DESTINATION STROBES, BRANCH CONDITION SELECT, RAM

ITEM	QTY.	MATERIAL DESCRIPTION	MAT'L PART NO.	MAT'L DWG. NO.	MAT'L SPEC.
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DRAWN BY: <i>J. Bernier</i> ENGINEER: <i>D. MILTON</i>		DATE: 6-27-61 12-3-61	SCHEMATIC DIAGRAM CARTRIDGE TAPE CONTROLLER SEE WHERE USED LIST NEXT ASSEMBLY		
RELEASE TO PROD. SUPERSEDES DWG.		FINISH NONE SCALE NONE	PART NUMBER 8000-5038 D-8000-5038-5		

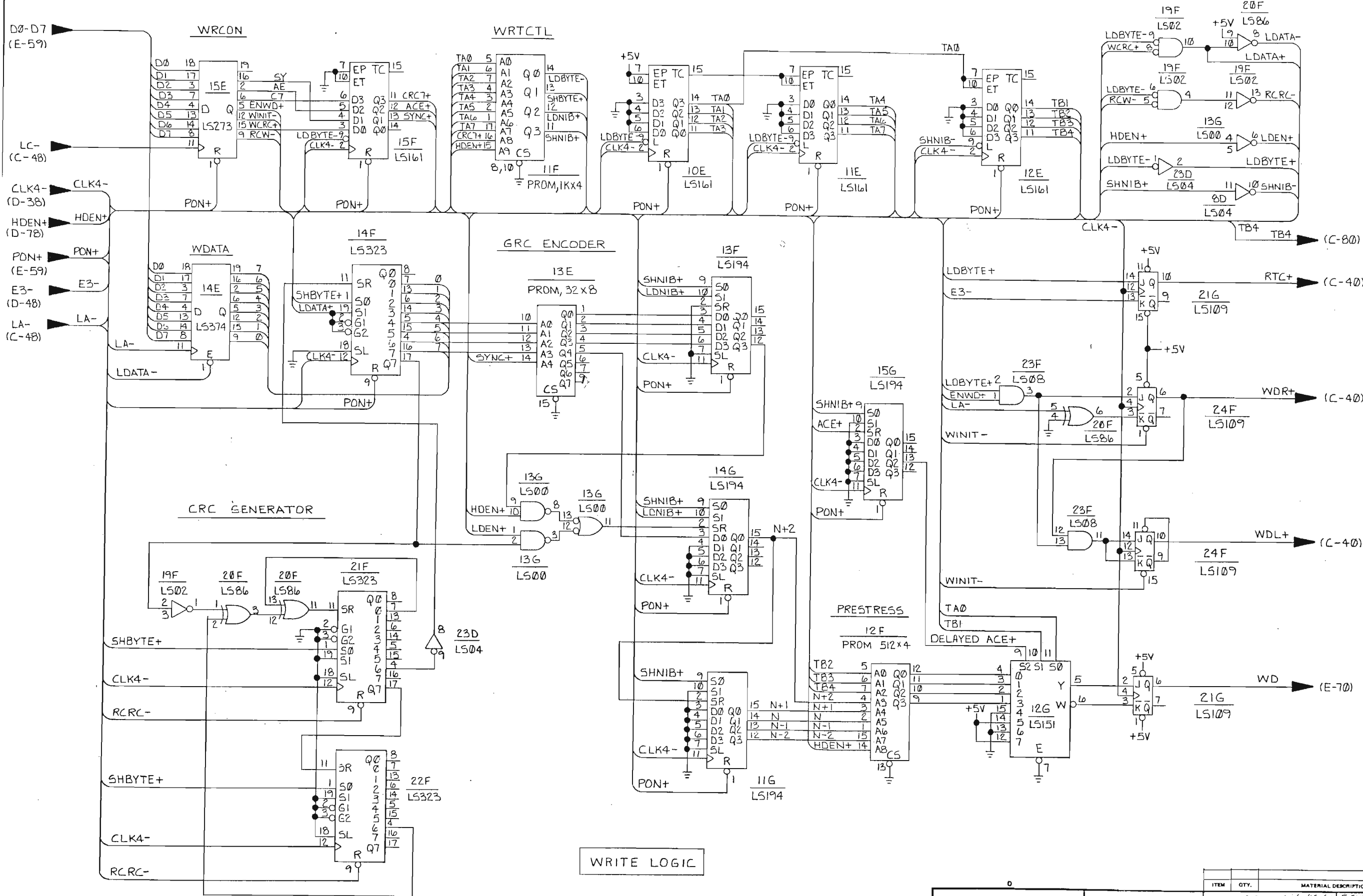
NOTE GROUND ALL EVEN PINS OF J3 EXCEPT 18 AND 42



NOTE A 1K RESISTOR MAY BE TEMPORARILY INSTALLED AT JUMPER W1 DURING DEBUG WHILE THERE IS NO PPU OR PPU EMULATOR CONNECTED TO J3.

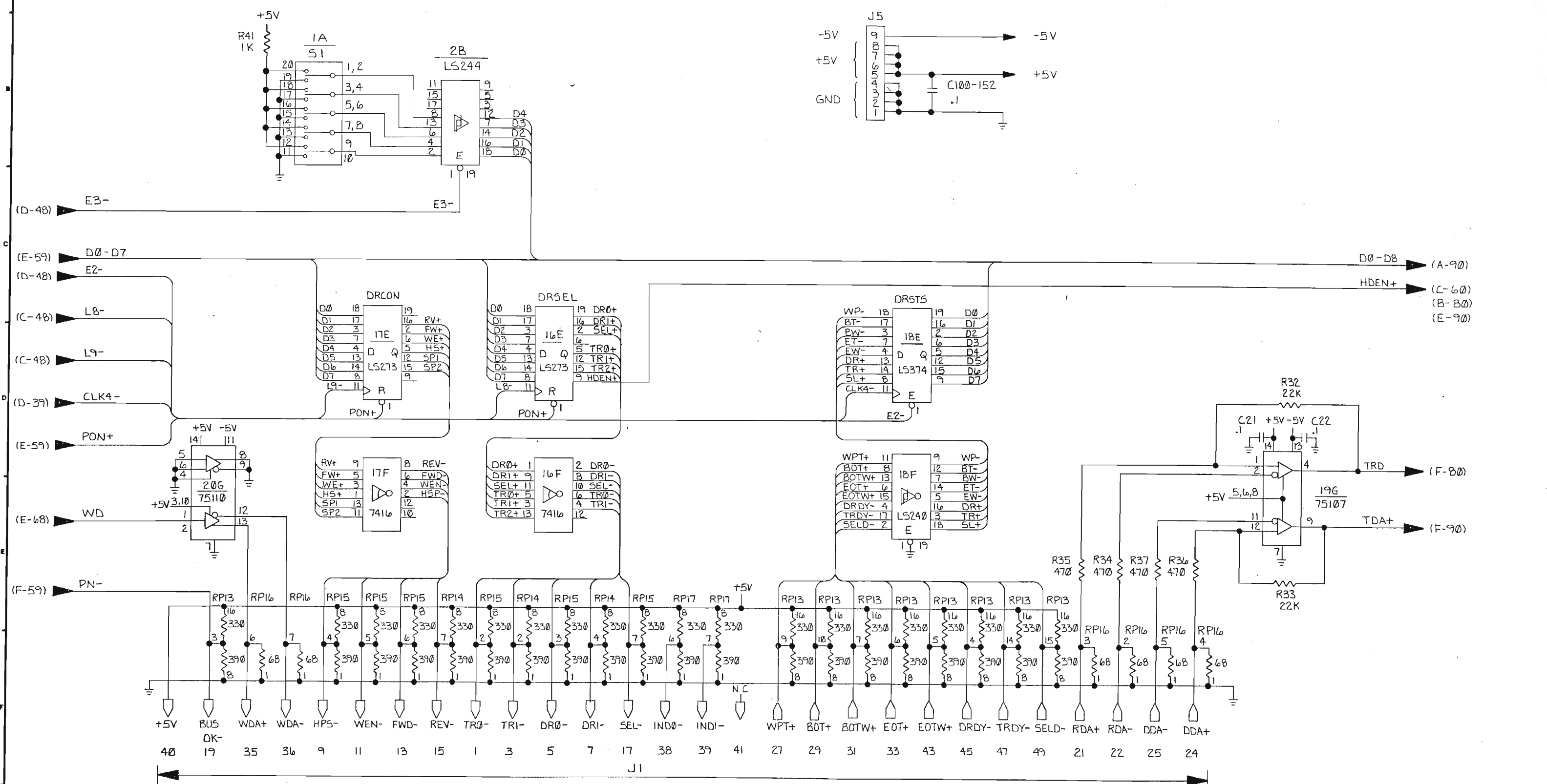
PPU INTERFACE

ITEM	QTY.	MATERIAL DESCRIPTION	MAT'L PART NO.	MAT'L-DRWG. NO.	MAT'L-SPEC.
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DRAWN BY <i>f. B...</i>		DATE 6-24-61	SCHEMATIC DIAGRAM		
ENGINEER <i>D. MILTON</i>		DATE 12-3-81	CARTRIDGE TAPE		
RELEASE TO PROD.			TITLE CONTROLLER		
SUPERSEDES DWG.			SEE WHERE USED LIST		
FINISH NONE		SCALE NONE	PART NUMBER B000-5038		
			D-8000-5038-S		



ITEM	QTY.	MATERIAL DESCRIPTION	MAT'L PART NO.	MAT'L DWG. NO.	MAT'L SPEC.
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DRAWN BY	D. Milton	DATE	6-24-81	SCHEMATIC DIAGRAM	
ENGINEER	D. Milton	DATE	10-3-81	CARTRIDGE TAPE	
RELEASE TO PROD.				TITLE CONTROLLER	
SUPERSEDES DWG.				SEE WHERE USED LIST	
				FINISH NONE	SCALE NONE
				PART NUMBER	8000-5038
					D-8000-5038-5

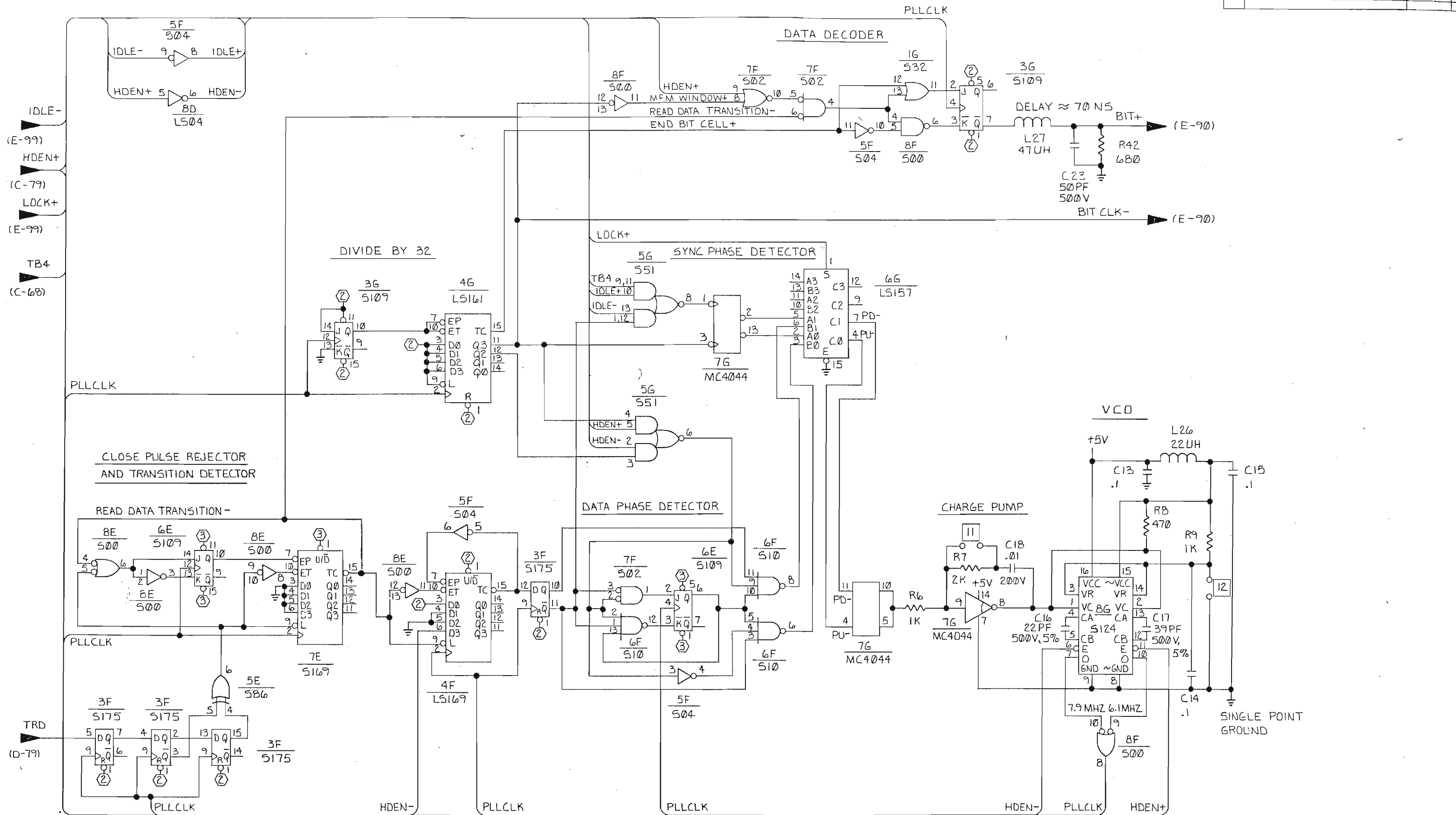
POWER



NOTE: GROUND ALL UNSPECIFIED PINS OF J1.

DRIVE INTERFACE & POWER

ITEM	QTY.	MATERIAL DESCRIPTION	MAT'L-PART NO.	MAT'L-DWG. NO.	MAT'L-SPEC.
0					
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DO NOT SCALE THIS DRAWING <small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES .XX ± .03 .XXX ± .008</small>					
DRAWN BY	D. MILTON DWIM	DATE	6-24-01	SCHEMATIC DIAGRAM CARTRIDGE TAPE	
ENGINEER	MILTON	DATE	12-3-81	TITLE CONTROLLER	
RELEASE TO PROD.		SEE WHERE USED LIST NEXT ASSEMBLY		PART NUMBER 8000-5038	
SUPSEDES DWG.		FINISH	NCNE	SCALE	NONE
			D-8000-5038-5	REV. SHEET OF	



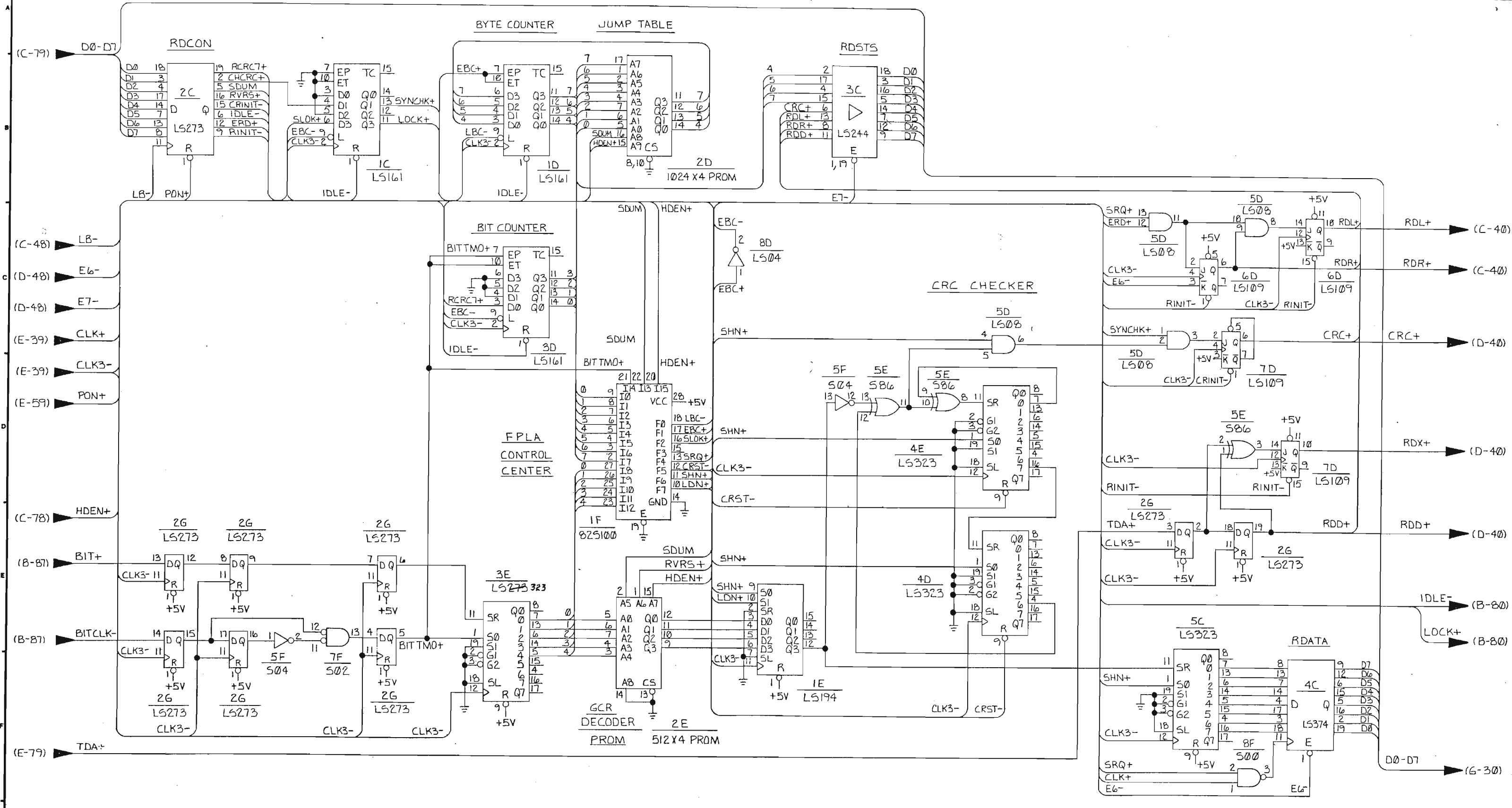
NOTE
 (2) = R39 1K +5V
 (3) = R40 1K +5V

PHASE LOCK LOOP

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 TOLERANCES .XX ± .02 .XXX ± .008

ITEM	QTY.	MATERIAL DESCRIPTION	MAT'L PART NO.	MAT'L DWG. NO.	MAT'L SPEC.
DRAWN BY: J. Evans DATE: 10-29-51					
D. MILTON DW. DATE: 12-3-51					
ENGINEER					
RELEASE TO PROD.					
SUPERSEDES DWG.					
SHEETS: 1 OF 1			TITLE: SCHEMATIC DIAGRAM CARTRIDGE TAPE		
NEXT ASSEMBLY			BTI COMPUTER SYSTEMS		
FINISH: NONE			SCALE: NONE		
PART NUMBER: 8000-5038			D-8000-5038-5		



ITEM	QTY.	MATERIAL DESCRIPTION	MAT'L PART NO.	MAT'L DWG. NO.	MAT'L SPEC.
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DRAWN BY: <i>D. Milton DWM</i>		DATE: 6-24-81	SCHEMATIC DIAGRAM CARTRIDGE TAPE TITLE CONTROLLER		
ENGINEER: D. MILTON DWM		DATE: 2-3-81	SEE WHERE USED LIST NEXT ASSEMBLY		
RELEASE TO PROD.			PART NUMBER: 8000-5038		
SUPERSEDES DWG.			FINISH: NGNE	SCALE: NONE	D-8000-5038-S