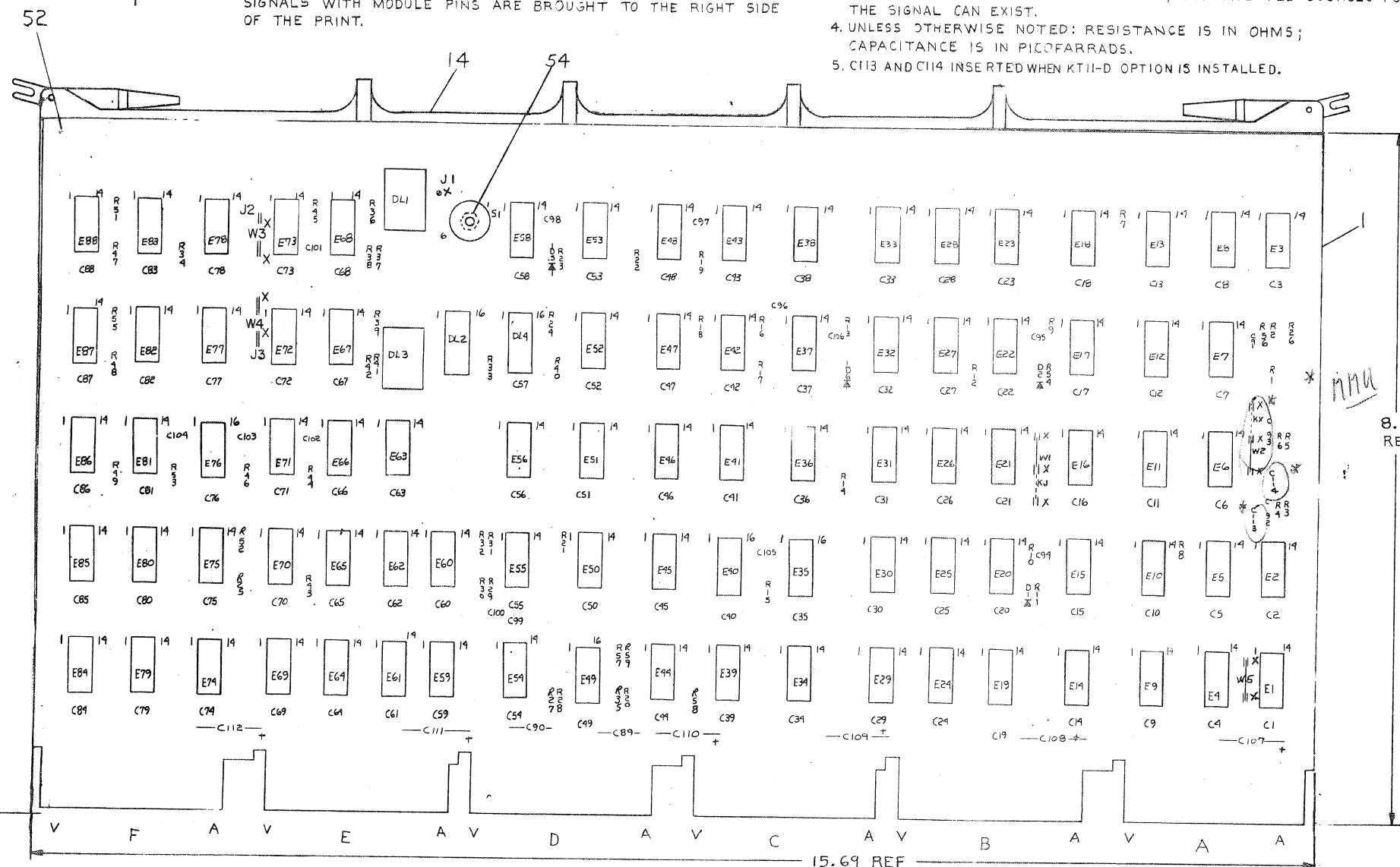


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NOTES:

1. PIN NOTATION THROUGHOUT IS ORDER UPON MODULE PLACEMENT IN THE KDII-A PROCESSOR. MODULE REFERENCE ALONE IS OBTAINED BY DELETING THE NUMBER (SLOT LOCATION) AFTER THE FIRST LETTER.
2. ALL SIGNALS THAT HAVE MODULE PINS ARE SO NOTED. OUTPUT SIGNALS WITH MODULE PINS ARE BROUGHT TO THE RIGHT SIDE OF THE PRINT.

3. PROCESSOR SIGNAL PREFIX NOTATION (K2-1 FOR EXAMPLE) IDENTIFIES THE SIGNAL SOURCE (PRINT AND MODULE). THE FIRST NUMBER AFTER THE K INDICATES THE MODULE PRINT SET, WHILE THE SECOND INDICATES THE SHEET WITHIN THE SET. SIGNALS WITH A "BUS" PREFIX REPRESENTS A "WIRED OR" SITUATION, AND MULTIPLE SOURCES FOR THE SIGNAL CAN EXIST.
4. UNLESS OTHERWISE NOTED: RESISTANCE IS IN OHMS; CAPACITANCE IS IN PICOFARRADS.
5. C113 AND C114 INSERTED WHEN KTII-D OPTION IS INSTALLED.



8.43
REF

15.69 REF

A07A2
B07A2

+5V

C1 THRU C13 + C107
0.1M F 6.8M F

+5V C07A2
C14 THRU C28 + C108
0.1M F 6.8M F

+5V D07A2
C29 THRU C43 + C109
0.1M F 6.8M F

+5V E07A2
C44 THRU C58 + C110
0.1M F 6.8M F

+5V F07A2
C59 THRU C73 + C111
0.1M F 6.8M F

+5V
C74 THRU C88 + C112
0.1M F 6.8M F

A07C2, A07T1
B07C2, B07T1
C07C2, C07T1
D07C2, D07T1
E07C2, E07T1
F07C2, F07T1

GND

FIRST USED ON OPTION MODEL

PDP 11

ETCH BOARD REV

D

PARTS LIST

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	SI	HANDLE, MODULE SWITCH, 10 POS	1210711-02	14
1	SI		1210042-01	13
4	D1, D2, D5, D6	DIODE D664	1100114	12
6	C107 THRU C112	CAP 6.8M F 35V ±10% TANT	1005306	11
3	C89, C90, C91	CAP 1200PF 100V ±5% D.M.	1002619	10
2	C104, C105	CAP 27PF 100V ±5% D.M.	1001739	9
88	C1 THRU C88	CAP .01M F 100V ±20% DISC	1001610	8
3	C97, C101, C103	CAP 1000PF 100V ±5% D.M.	1000042	7
3	C92, C99, C100	CAP 470PF 100V ±5% D.M.	1000024	6
5	C94, C96, C98, C102, C106	CAP 330PF 100V ±5% D.M.	1000023	5
2	C93, C95	CAP 220PF 100V ±5 D.M.	1000021	4
				3
				2
1		ETCH CIRCUIT BOARD	5009983	1
TIMING				
digital EQUIPMENT CORPORATION				
MAYNARD, MASSACHUSETTS				
K4-1				
REV. E				
SIZE CODE: DCS M7234-0-1				
SCALE: 1 OF 6				
SHEET				

SEMICONDUCTOR CONVERSION CHART

DEC NO. EIA NO. DEC NO. EIA NO.

CHK CHANGE NO. REV

ORIGINATED A

REVISED

DATE

BY

CHK'D

DATE

BY

DATE

BY

DATE

BY

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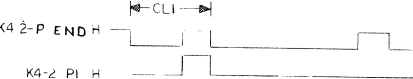
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START

STOP

XOR TEST:
JUMPERS W3 AND W4 ARE REMOVED ONLY DURING XOR MODULE TEST. THEY ARE NORMALLY INSERTED.

CLOCK ADJUSTMENT:
CLOCK ADJUSTMENT REQUIRES A DUAL-TRACE OSCILLOSCOPE WITH ONE CHANNEL (TRIGGERING) ON K4-2 P END H AND THE OTHER CHANNEL ON K4-2 PI H. THE MACHINE SHOULD BE IN THE CONSOLE LOOP WAITING FOR A SWITCH ACTIVATION. MICRO WORDS CON04 (026) AND CON06 (046) THIS LOOP IS USUAL WHEN IN CONSOLE MODE, OR MAY BE FORCED BY A START IN THE HALT MODE. THE SI SWITCH IS ADJUSTED (10 NANO SECONDS INCREMENTS) UNTIL THE CL1 INTERVAL NOTED BELOW IS ≥ 135 NANO SECONDS.



CLOCK CONTROL

CLK WAVEFORMS:

U WORD CONTROL	NAME	WAVEFORMS
K2-8 CLK1 (1)H = 0 K2-8 CLK0 (1)H = 0,1	CL1	K4-2 P1 H
K2-8 CLK1 (1)H = 1 K2-8 CLK0 (1)H = 0	CL2	K4-2 P2 H
K2-8 CLK1 (1)H = 1 K2-8 CLK0 (1)H = 1	CL3	K4-2 P2 H

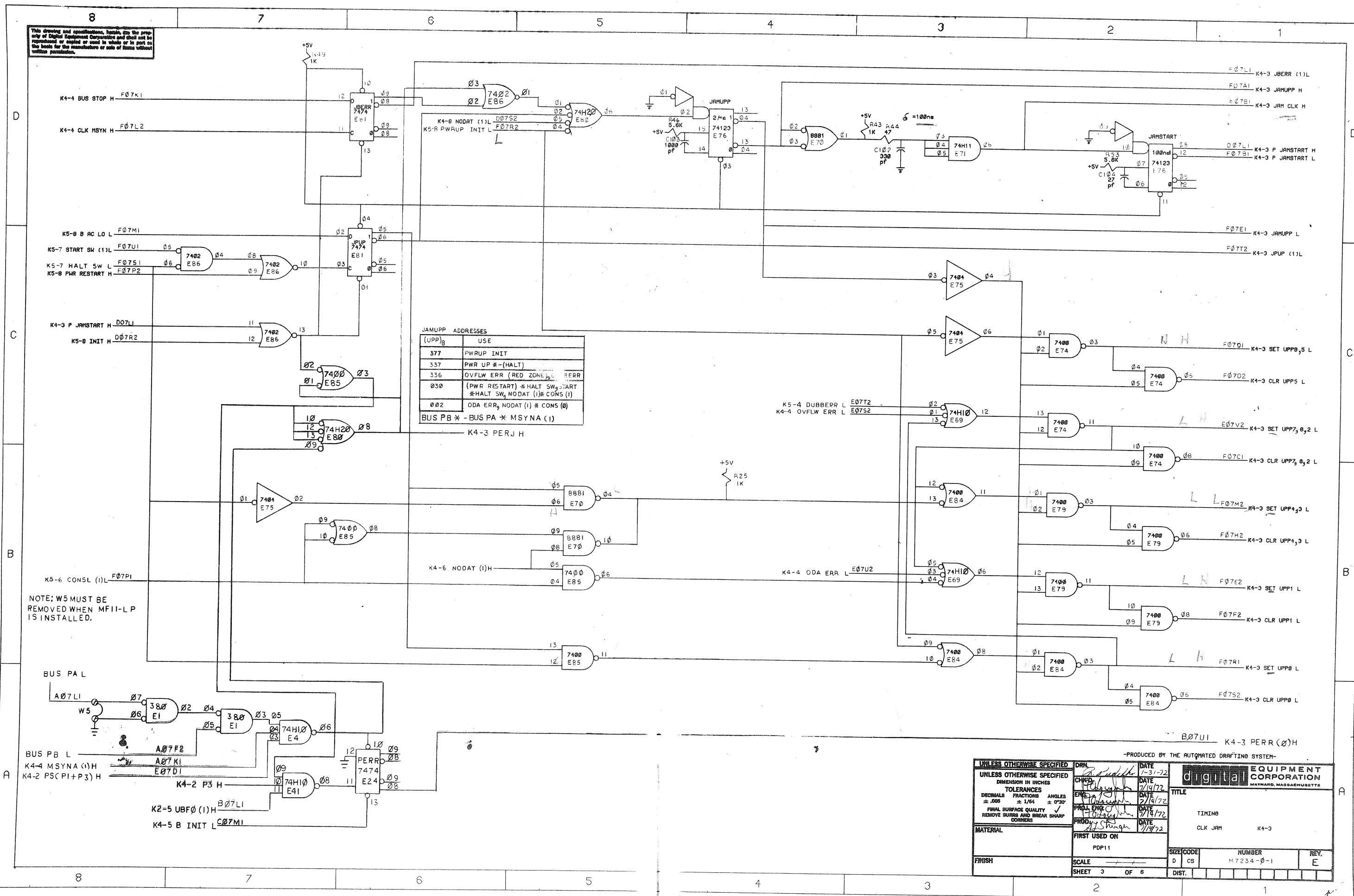
NOTE:
* SYMBOL ON SCHEMATIC INDICATES NOMINAL SETTING FOR A CLI TIME ≥ 135 NS. DETAILS ON CLOCK ADJUSTMENTS NOTED BELOW.

CLOCK PULSE GENERATING

CLOCK ENABLING GATING

UNLESS OTHERWISE SPECIFIED		DATE	1-26-72
UNLESS OTHERWISE SPECIFIED		DATE	7/14/72
DIMENSION IN INCHES		DATE	7/14/72
TOLERANCES		DATE	7/14/72
DECIMALS FRACTIONS ANGLES		DATE	7/14/72
± .005 ± 1/64 ± 0°30'		DATE	7/14/72
FINAL SURFACE QUALITY		DATE	7/14/72
REMOVE BURRS AND BREAK SHARP CORNERS		DATE	7/14/72
MATERIAL		DATE	7/14/72
FINISH		DATE	7/14/72
FIRST USED ON		DATE	7/14/72
POP11		DATE	7/14/72
SCALE		DATE	7/14/72
SHEET 2 OF 6		DATE	7/14/72
DIST.		DATE	7/14/72
NUMBER		DATE	7/14/72
M7234-0-1		DATE	7/14/72
REV.		DATE	7/14/72
E		DATE	7/14/72

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UNLESS OTHERWISE SPECIFIED		DATE	1-31-72
DIMENSION IN INCHES		DATE	7/14/72
TOLERANCES		DATE	7/14/72
DECIMALS	FRACTIONS	DATE	7/14/72
±.005	± 1/64	DATE	7/14/72
FURNISH SURFACE QUALITY		DATE	7/14/72
REMOVE BURRS AND BREAK SHARP CORNERS		DATE	7/14/72
MATERIAL		DATE	7/14/72
FINISH		DATE	7/14/72
FIRST USED ON		DATE	7/14/72
PDP11		DATE	7/14/72
SCALE		DATE	7/14/72
SHEET 3 OF 6		DATE	7/14/72
DIST.		DATE	7/14/72
TITLE		DATE	7/14/72
TIMING		DATE	7/14/72
CLK JAM		DATE	7/14/72
K4-3		DATE	7/14/72
SIZE CODE		DATE	7/14/72
NUMBER		DATE	7/14/72
REV.		DATE	7/14/72
E		DATE	7/14/72

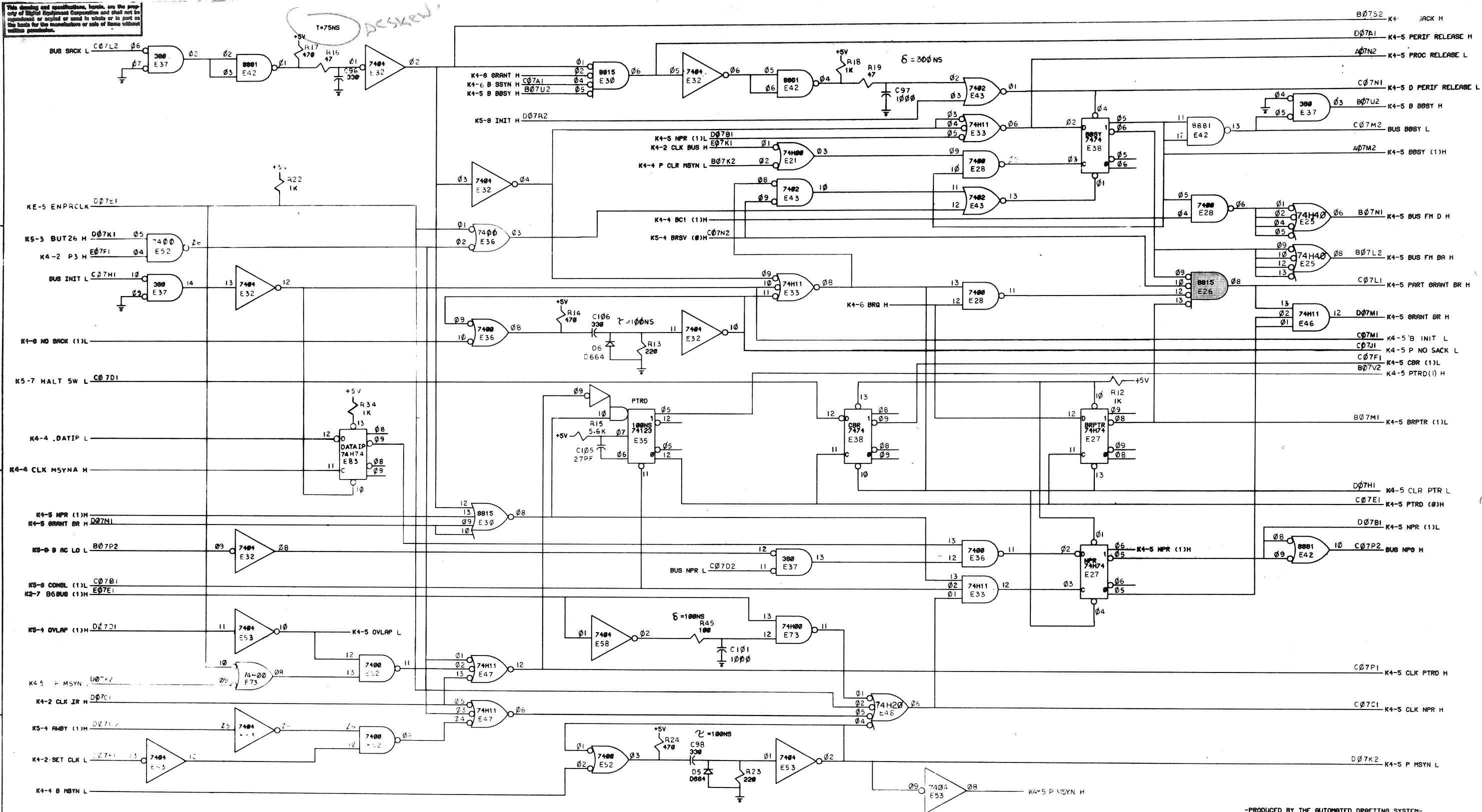
A



NOTE
ABOVE BIT PATTERNS OCCUR IN COMBINATIONS
WITH OTHER DAD BITS. THE TOTAL OCTAL DAD
CODE IS NOTED IN SPECIFIC U WORDS IN THE
FLOWS.

UNLESS OTHERWISE SPECIFIED		DRN. <i>1-3 72</i>		 DIGITAL EQUIPMENT CORPORATION MAYFORD, MASSACHUSETTS	
UNLESS OTHERWISE SPECIFIED		CHUCK <i>1-3 72</i>			
DIMENSION IN INCHES		DATE <i>7-14-72</i>		TITLE TIMING BUS DATA CNTL K4-4	
TOLERANCES		DATE <i>7-14-72</i>			
DECIMALS	FRACTIONS	DATE <i>7-14-72</i>			
± .005	± 1/64	DATE <i>7-14-72</i>			
FRAIL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS		DATE <i>7-14-72</i>		SIZE CODE NUMBER REV. D CS M7234-0-1 E	
MATERIAL		DATE <i>7-14-72</i>			
FINISH		DATE <i>7-14-72</i>			
SCALE <i>1-1</i>		DATE <i>7-14-72</i>			
SHEET 4 OF 8		DST.			

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-PRODUCED BY THE AUTOMATED DRAFTING SYSTEM-

UNLESS OTHERWISE SPECIFIED		DRAWN <i>E. Pugh Jr.</i>	DATE 2-1-72	digi EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES		CHECKED <i>[Signature]</i>	DATE 2/4/72	TITLE TIMING BUS OWNERSHIP K4-S	
TOLERANCES		DESIGNED <i>[Signature]</i>	DATE 2/4/72		
DECIMALS FRACTIONS ANGLES		ENG. <i>[Signature]</i>	DATE 2/4/72		
± .008 ± 1/64 ± 0°30'		MFG. ENG. <i>[Signature]</i>	DATE 2/9/72		
FINISH SURFACE QUALITY		PROD. OFF. <i>[Signature]</i>	DATE 2/9/72		
REMOVE BURRS AND BREAK SHARP CORNERS					
MATERIAL		FIRST USED ON PDP11		SIZE CODE D CS NUMBER 7134-001 REV. E	
FINISH		SCALE SHEET 5 OF 6		DIST.	

