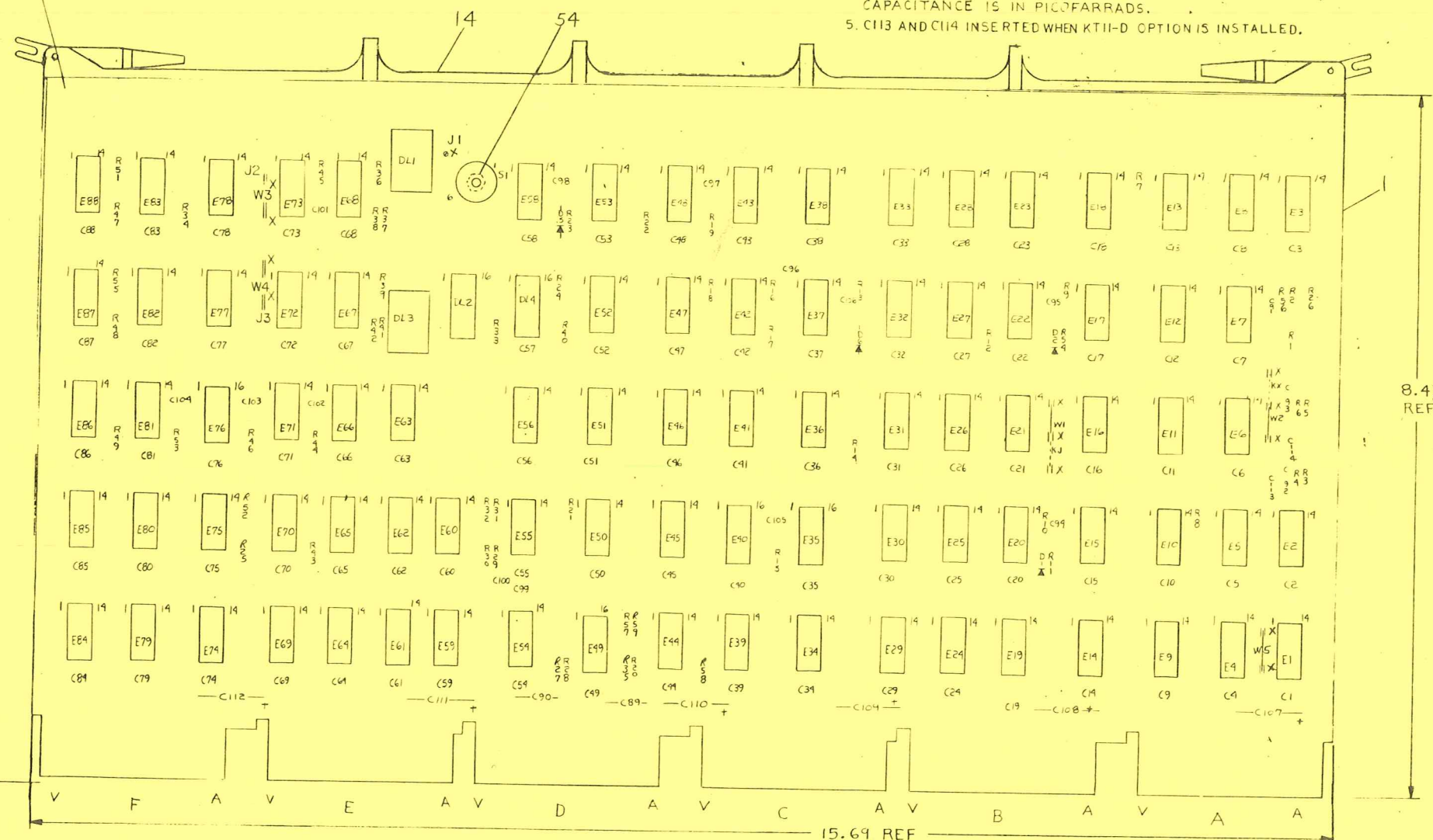
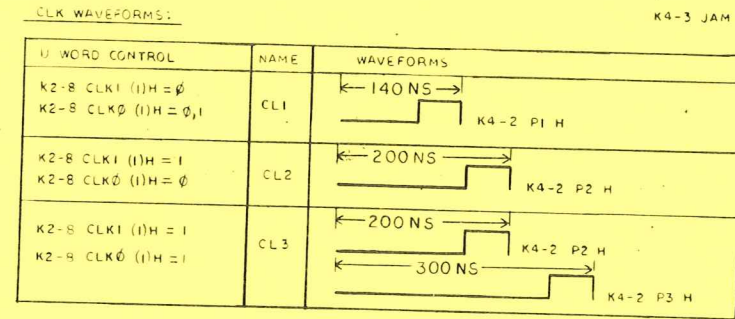


3. PROCESSOR SIGNAL PREFIX NOTATION (K2-1 FOR EXAMPLE) IDENTIFIES THE SIGNAL SOURCE (PRINT AND MODULE). THE FIRST NUMBER AFTER THE K INDICATES THE MODULE PRINT SET, WHILE THE SECOND INDICATES THE SHEET WITHIN THE SET. SIGNALS WITH A 'BUS' PREFIX REPRESENTS A 'WIRED OR' SITUATION, AND MULTIPLE SOURCES FOR THE SIGNAL CAN EXIST.
4. UNLESS OTHERWISE NOTED: RESISTANCE IS IN OHMS; CAPACITANCE IS IN PICOFARADS.
5. C113 AND C114 INSERTED WHEN K11-D OPTION IS INSTALLED.



| QTY              |  | REF DESIGNATION | DESCRIPTION | PART NO.                                                | ITEM NO. |
|------------------|--|-----------------|-------------|---------------------------------------------------------|----------|
| PARTS LIST       |  |                 |             |                                                         |          |
| ETCH BOARD REV D |  |                 |             |                                                         |          |
| DRN. 2011/11/11  |  | DATE 6-23-72    |             | digital EQUIPMENT CORPORATION<br>MAYNARD, MASSACHUSETTS |          |
| CHKD. 11/11/72   |  | DATE 7/14/72    |             | TITLE                                                   |          |
| ENG. 11/11/72    |  | DATE 7/13/72    |             | TIMING                                                  |          |
| PROD. 11/11/72   |  | DATE 7/14/72    |             | K4-1                                                    |          |
| NEXT HIGHER ASSY |  | SCALE           |             | SIZE CODE                                               |          |
| M011-A           |  | SHEET 1 OF 6    |             | NUMBER                                                  |          |
| DEC NO.          |  | EIA NO.         |             | M7234-0-1                                               |          |
| CONVERSION CHART |  | DIST.           |             | REV. E                                                  |          |

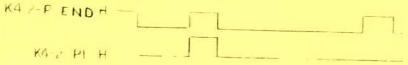
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



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

XOR TEST:  
JUMPER 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 (TP66P11)) ON K4-2 P END H AND THE OTHER CHANNEL ON K4-2 P1 H. THE MACHINE SHOULD BE IN THE CONSOLE LOOP WAITING FOR A SWITCH ACTIVATION. (HCP) WORDS CON04 (22C) AND CON06 (24C). THIS LOOP IS USUAL WHEN IN CONSOLE MODE, OR MAY BE FORCED BY A START IN THE HALT MODE. THE S1 SWITCH IS ADJUSTED (10 NANO SECONDS INCREMENTS) UNTIL THE CLI INTERVAL NOTED BELOW IS  $\geq 135$  NANO SECONDS.



UNLESS OTHERWISE SPECIFIED

| UNLESS OTHERWISE SPECIFIED                               | DRN           | DATE |
|----------------------------------------------------------|---------------|------|
| DIMENSION IN INCHES                                      | CHKD          | DATE |
| TOLERANCES                                               | ENG           | DATE |
| DECIMALS FRACTIONS ANGLES                                | PRG           | DATE |
| $\pm .008 \pm 1/64 \pm 0^{\circ}30'$                     | PROD          | DATE |
| FIL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS |               |      |
| MATERIAL                                                 | FIRST USED ON |      |
| FINISH                                                   | PDP11         |      |
| SCALE                                                    | SHEET 2 OF 6  |      |

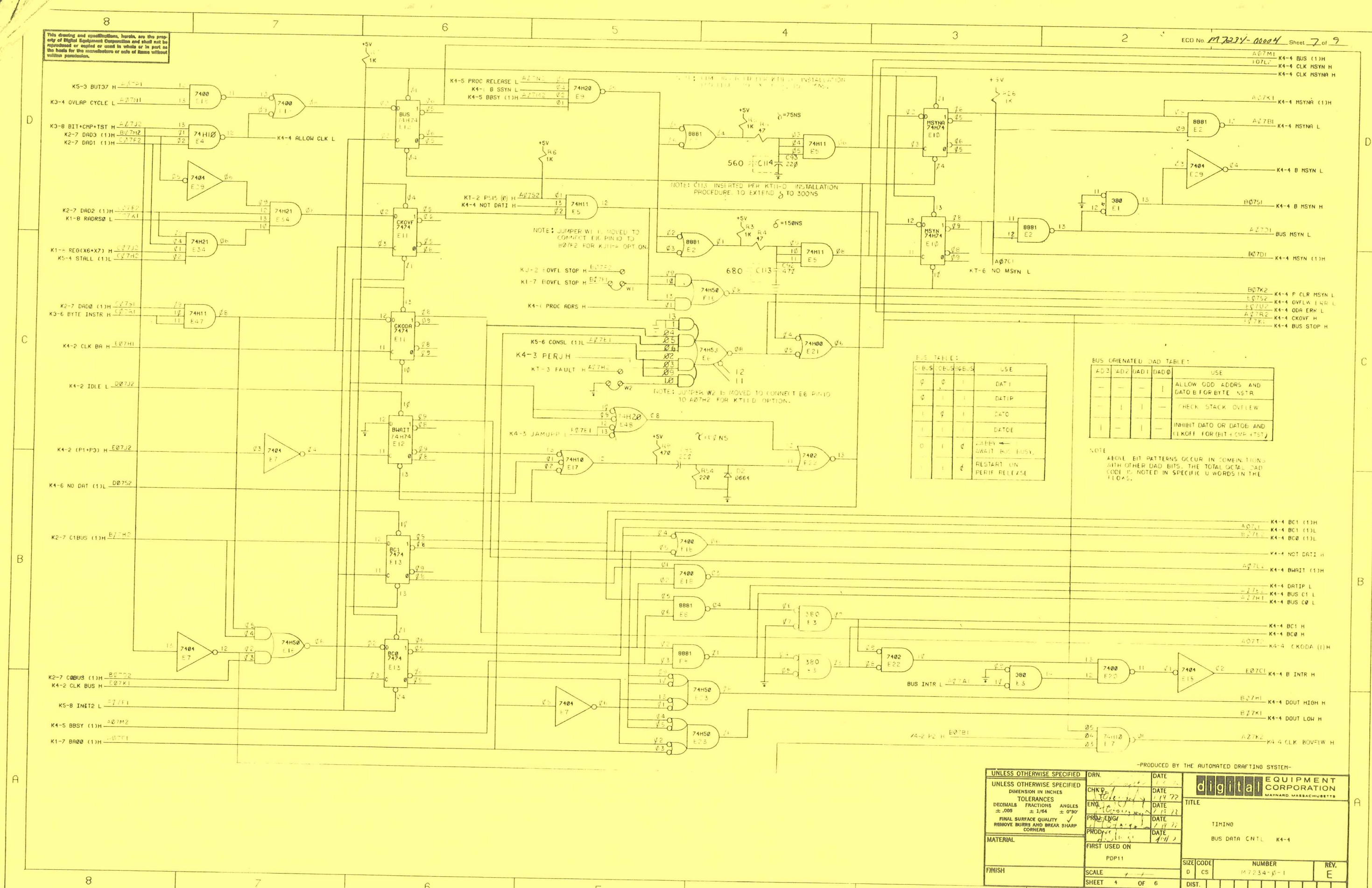
digital EQUIPMENT CORPORATION  
MAYNARD, MASSACHUSETTS

TITLE  
TIMING  
CLOCK K4-2

SIZE CODE  
D CS  
NUMBER  
M7234-0-1  
REV.  
E



This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied in whole or in part on the basis for the manufacture or sale of items without written permission.



BUS TABLE:

| C.BUS | C.BUS | C.BUS | USE                      |
|-------|-------|-------|--------------------------|
| 0     | 0     | 0     | DAT1                     |
| 0     | 0     | 1     | DATIP                    |
| 0     | 1     | 0     | DAT0                     |
| 0     | 1     | 1     | DAT0E                    |
| 1     | 0     | 0     | WAIT                     |
| 1     | 0     | 1     | WAIT BUS                 |
| 1     | 1     | 0     | RESTART ON PERIF RELEASE |
| 1     | 1     | 1     |                          |

BUS ORIENTED DAD TABLE:

| AD3 | AD2 | AD1 | AD0 | USE                                                 |
|-----|-----|-----|-----|-----------------------------------------------------|
| 0   | 0   | 0   | 0   | ALLOW ODD ADDRS AND DAT0 B FOR BYTE STR             |
| 0   | 0   | 0   | 1   | CHECK STACK OVERFLOW                                |
| 0   | 0   | 1   | 0   | INHIBIT DAT0 OR DAT0E AND CLKOFF FOR (BIT+COMP+TST) |
| 0   | 0   | 1   | 1   |                                                     |

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

UNLESS OTHERWISE SPECIFIED

DRN. DATE 1/14/77

CHK'D DATE 1/14/77

ENG'D DATE 1/14/77

PRD'G DATE 1/14/77

PROD'D DATE 1/14/77

FIRST USED ON PDP11

SCALE SHEET 4 OF 6

SIZE CODE 0 CS

NUMBER 17234-0-1

REV. E

digital EQUIPMENT CORPORATION

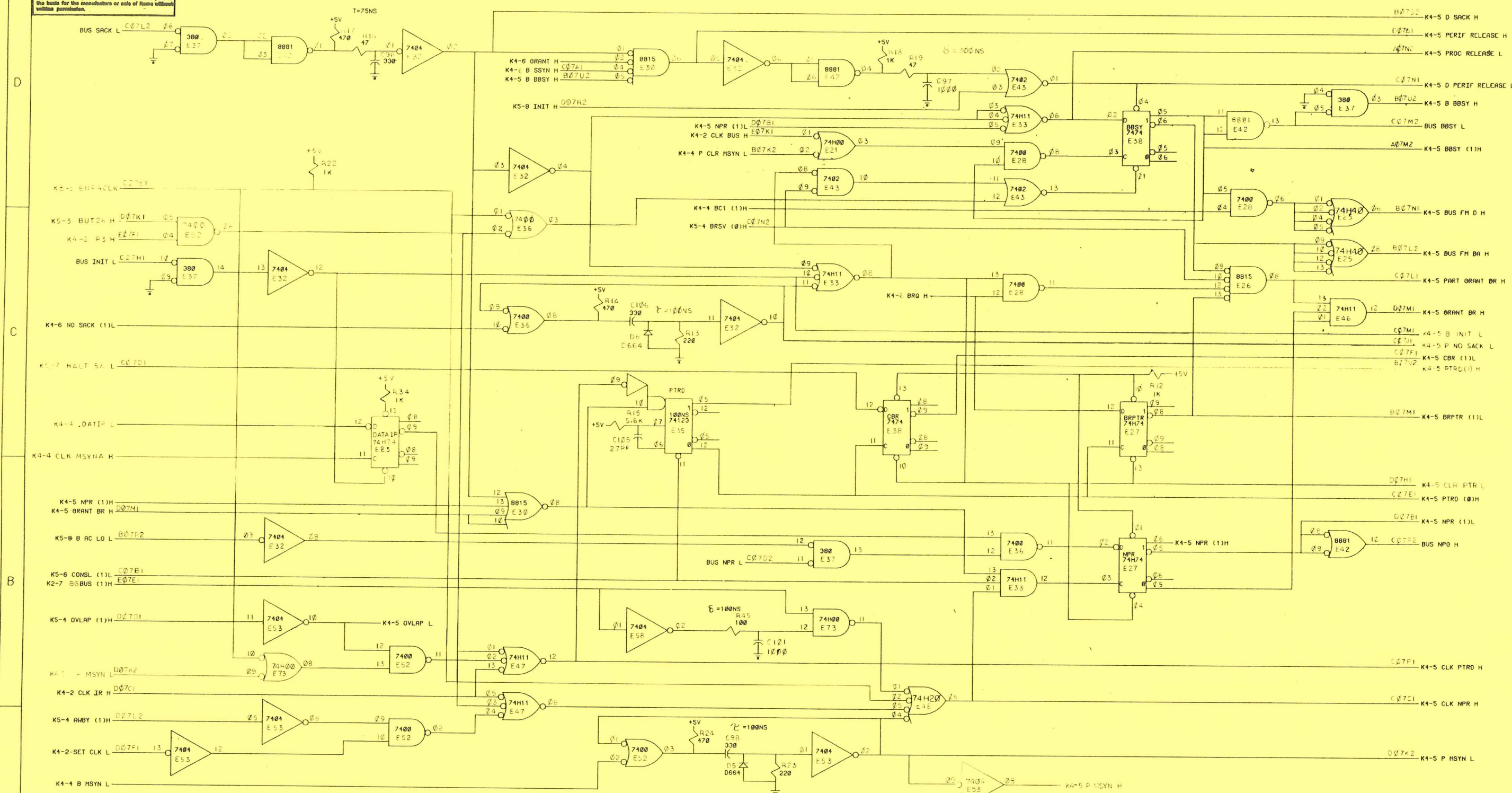
MAINTAIN MASSACHUSETTS

TITLE TIMING

BUS DATA CNTRL K4-4

PRODUCED BY THE AUTOMATED DRAFTING SYSTEM

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part for the manufacture or sale of items without written permission.

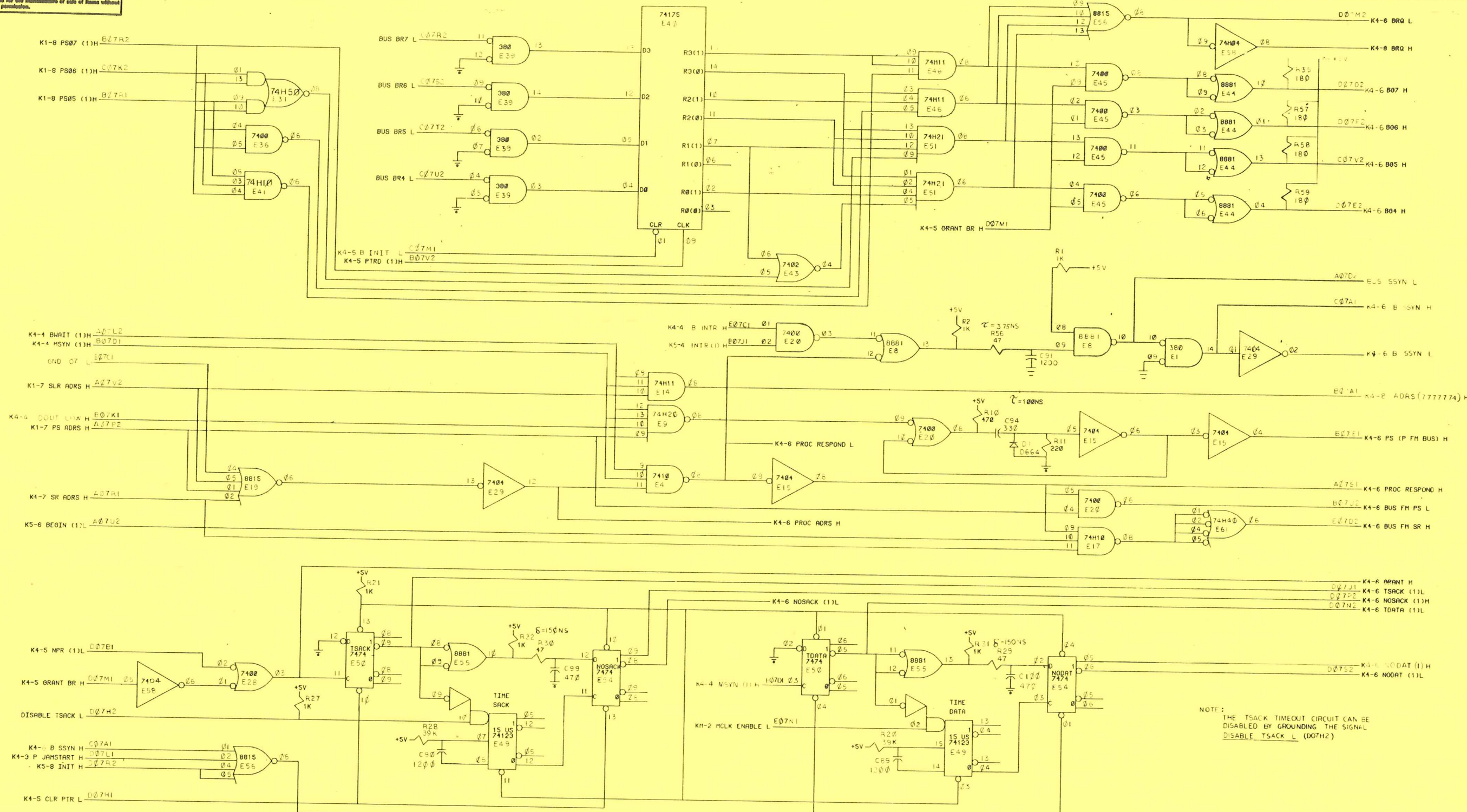


-PRODUCED BY THE AUTOMATED DRAFTING SYSTEM-

|                                                                                                                                        |  |                          |                    |                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------|--------------------|---------------------------------------------------------------------------------------------------------|
| UNLESS OTHERWISE SPECIFIED                                                                                                             |  | DRN. <i>07234-00001</i>  | DATE <i>2-1-72</i> | <b>digital EQUIPMENT CORPORATION</b><br>MAYNARD, MASSACHUSETTS<br>TITLE<br>TIMING<br>BUS OWNERSHIP K4-5 |
| UNLESS OTHERWISE SPECIFIED                                                                                                             |  | CHKD. <i>[Signature]</i> | DATE <i>2/1/72</i> |                                                                                                         |
| DIMENSION IN INCHES                                                                                                                    |  | ENG. <i>[Signature]</i>  | DATE <i>2/1/72</i> |                                                                                                         |
| TOLERANCES                                                                                                                             |  | MOD. <i>[Signature]</i>  | DATE <i>2/1/72</i> |                                                                                                         |
| DECIMALS FRACTIONS ANGLES<br>$\pm .005$ $\pm 1/64$ $\pm 0^{\circ}30'$<br>FINAL SURFACE QUALITY<br>REMOVE BURRS AND BREAK SHARP CORNERS |  | FIRST USED ON<br>PDP11   |                    | SIZE CODE<br>D CS                                                                                       |
| MATERIAL                                                                                                                               |  | SCALE<br>SHEET 5 OF 8    |                    | NUMBER<br>07234-0-1                                                                                     |
| FINISH                                                                                                                                 |  | DWT.                     |                    | REV.<br>E                                                                                               |

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

ECO No. M7234-00004 Sheet 9 of 9



NOTE:  
THE TSACK TIMEOUT CIRCUIT CAN BE  
DISABLED BY GROUNDING THE SIGNAL  
DISABLE TSACK L (D07H2)

|                                                                                                                                                                                       |  |                     |              |                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------|--------------|---------------------------------------------------------|
| UNLESS OTHERWISE SPECIFIED                                                                                                                                                            |  | DRN. 10000000       | DATE 7/14/72 | digital EQUIPMENT CORPORATION<br>MAYNARD, MASSACHUSETTS |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSION IN INCHES<br>TOLERANCES<br>DECIMALS FRACTIONS ANGLES<br>±.005 ±.004 ±.030<br>FINAL SURFACE QUALITY<br>REMOVE BURRS AND BREAK SHARP<br>CORNERS |  | CHK'D 10000000      | DATE 7/14/72 |                                                         |
| MATERIAL                                                                                                                                                                              |  | ENG. 10000000       | DATE 7/14/72 | TITLE<br>TIMING<br>K4-6                                 |
| FINISH                                                                                                                                                                                |  | PROD. 10000000      | DATE 7/14/72 |                                                         |
| FIRST USED ON                                                                                                                                                                         |  | PDP11               |              | SIZE CODE<br>D CS                                       |
| SCALE                                                                                                                                                                                 |  | SHEET 8 OF 8        |              |                                                         |
| DIST.                                                                                                                                                                                 |  | NUMBER<br>M7234-0-1 |              | REV<br>E                                                |