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W130 PARTS REFERENCE

| ITEM NO | DRAWING REFERENCE   | DESCRIPTION          | PART NUMBER  | QUANTITY |
|---------|---|----------------------|--------------|----------|
| 1       | R1,R3,R5,R7,R9,R11,R13,R15,R17,R19,R21,R23,R25,R27,R29,R31,R33,R35,R37,R39,R41,R43,R45,R47,R49,R51,R53,R55  | 15K 1/4W 5%          | RES. 1300486 | 28       |
| 2       | R2,R4,R6,R8,R10,R12,R14,R16,R18,R20,R22,R24,R26,R28,R30,R32,R34,R36,R38,R40,R42,R44,R46,R48,R50,R52,R54,R56 | 470 1/4W 5%          | RES. 1300516 | 28       |
| 3       | Q1-Q56  | DEC 3009B TRANSISTOR | 523100       | 56       |
| 4       | PI  | HPC7 BLOCK CONNECTOR | 209123       |          |

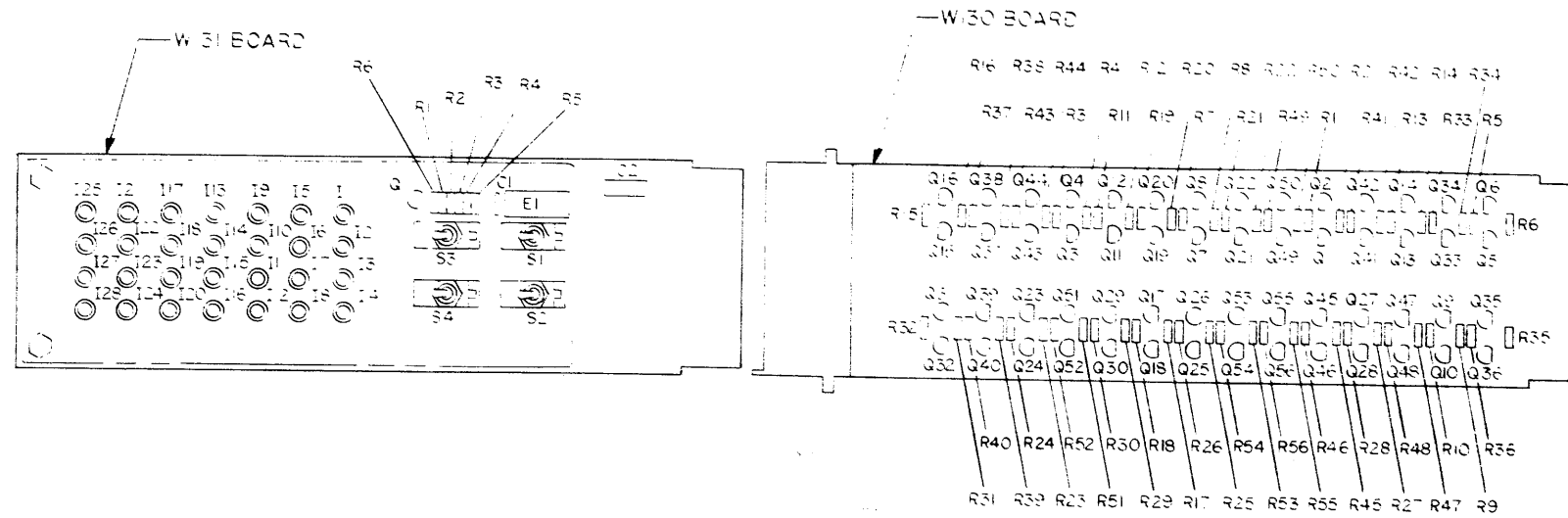
W131 PARTS REFERENCE

| ITEM NO | DRAWING REFERENCE | DESCRIPTION                   | PART NUMBER  | QUANTITY |
|---------|-------------------|-------------------------------|--------------|----------|
| 1       | E1                | DEC 400N                      | 1300575      | 1        |
| 2       | C1                | .01 MFD 100V 20% DIC CAP      | 13001612     | 1        |
| 3       | C2                | .05 MFD 35V 20% ST CAP        | 1300067      | 1        |
| 4       | R1,R2,R3,R4,R5    | 3A 1/4W 5%                    | RES. 1300432 | 5        |
| 5       | R6                | 330 1/4W 5%                   | RES. 1300295 | 1        |
| 6       | Q1                | DEC 3009B TRANSISTOR          | 523100       | 1        |
| 7       | I1-I28            | LAMP HUDSON, BLUE #2309G      | 1209219      | 28       |
| 8       | S1-S4             | SWITCH, TOGGLE, SPST, 6A1T-12 | 1201168      | 4        |

NOTES:

- THE KM11 IS A TWO MODULE (W130, W131) OPTION TO THE K111 TO AID MAINTENANCE. THIS PREWIRED OPTION IS INSTALLED BY INSERTING THE W130 MODULE INTO LOCATION S02 AND INSERTING THE W131 MODULE INTO THE W130. NOTE THAT THE SWITCHES AND LIGHTS FACE TOWARD AND EXTEND BELOW THE CONSOLE. THE BOTTOM COVER MUST BE REMOVED WITH THE CHASSIS EXTERNAL TO THE CABINET.
- LABELS FOR THE INTERNAL MACHINE STATES LAMPS ARE NOTED ON THE W131 ETCH BOARD. SWITCHES PROVIDE A MANUAL CLOCK AND BUS RESPONSE AND ARE ACTIVE WHEN THE TOGGLE IS TOWARD THE NAME. NORMAL MACHINE OPERATION REQUIRES THAT ALL SWITCHES BE IN THE OFF POSITION.
- "M CLK ENABLE" AND "M CLK" PROVIDE A MANUAL CLOCK FOR THE K111. "M CLK ENABLE" IS ACTIVATED WHILE THE PROCESSOR IS HALTED. EACH TOGGLE OF "M CLK" THEN STEPS THE PROCESSOR THROUGH THE SMALLEST PROCESSOR CLOCK INTERVALS, THE R W STATES, THE NEXT HIGHEST CLOCK INTERVAL (S CLK) IS PROVIDED BY FOUR TOGGLES (2 COMPLETE SWITCH CYCLES) AND INDICATED BY THE R W2 LAMP. R W2 IS THE LAST (OR REST) R W STATE IN A "S CLK" INTERVAL. NORMAL OPERATION IS RESUMED WHEN "M CLK" AND THEN "M CLK ENABLE" ARE RETURNED TO OFF.
- "NO TIME OUT" AND "SSYN" PROVIDE A MANUAL BUS RESPONSE TO THE PROCESSOR. IT IS USED WHEN OTHER DEVICES ARE NOT AVAILABLE. "NO TIME OUT" IS ACTIVATED WHILE THE PROCESSOR IS HALTED, TO ELIMINATE AN ERROR TRAP ON MANUAL "SSYN" AT THE APPROPRIATE TIMES IN A BUS TRANSFER "SSYN" IS ACTIVATED AND DEACTIVATED.

COMPONENT PLACEMENT



MIN NOMENCLATURE

MODULE PROCESSOR

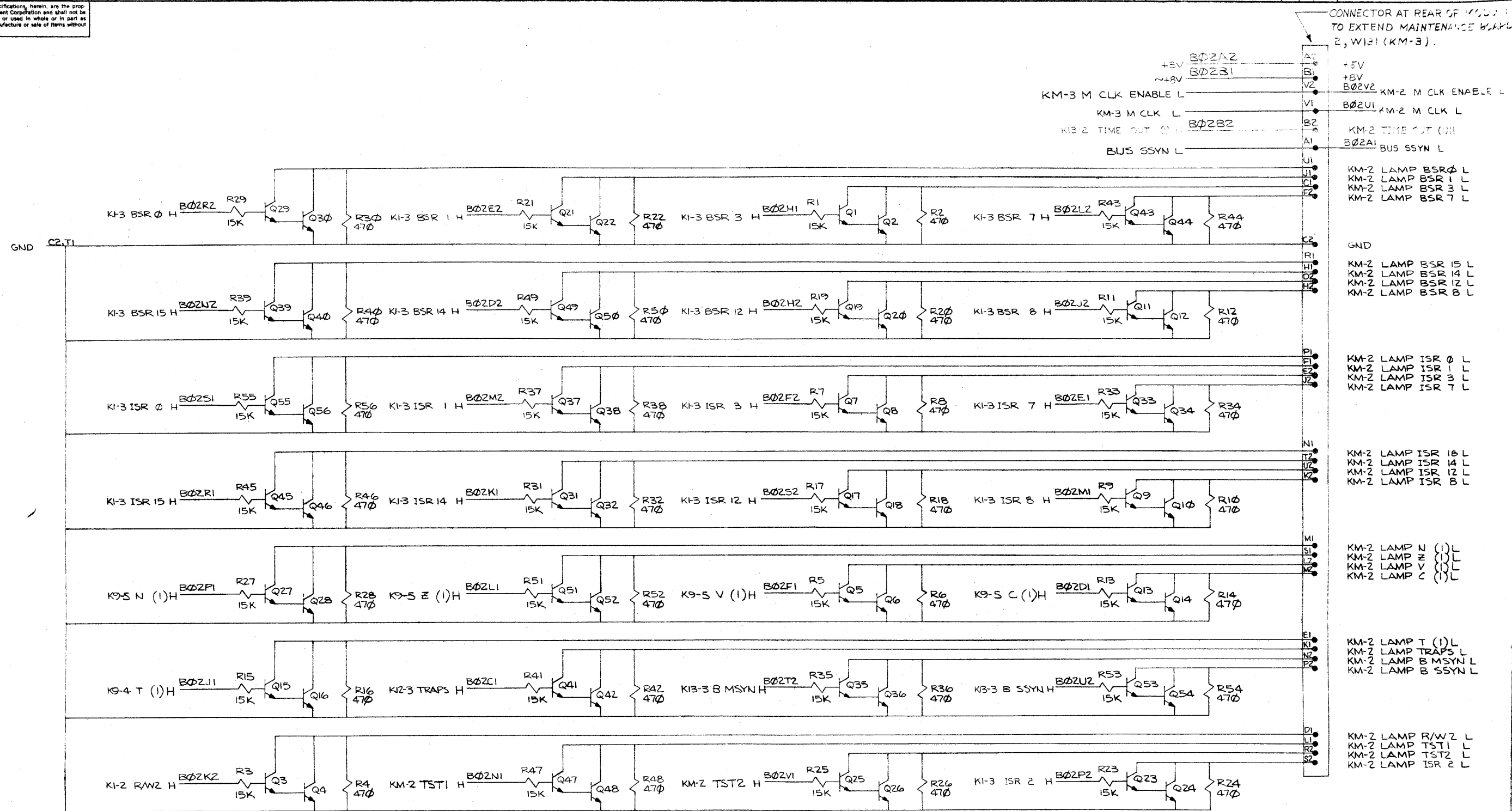
A B

| REV | DATE | BY | CHKD |
|-----|------|----|------|
| 1   |      |    |      |

| QTY.   | DESCRIPTION | PART NO.  | ITEM NO.       |
|--|-------------|---|----------------|
| PARTS LIST   |             |   |                |
| FIRST USED ON OPTION / MODEL<br>PDP-11   |             |   |                |
| DO NOT SCALE DRAWING<br>UNLESS OTHERWISE SPECIFIED<br>DIMENSION IN INCHES<br>TOLERANCES<br>DECIMALS FRACTIONS ANGLES<br>= .005 ± 1/64 = 0°30'<br>FINAL SURFACE QUALITY<br>REMOVE BURRS AND BREAK SHARP CORNERS |             | DRN: <i>[Signature]</i> DATE: 12/22/70<br>CHK'D: DATE: 12/22/70<br>ENG: DATE: 12/22/70<br>PROJ. ENG: DATE: 12/22/70<br>PROD. DATE: 12/22/70 | DATE: 12/22/70 |
| MATERIAL<br>+ + +  |             | NEXT HIGHER ASSY<br>A-ML-KM11-0   | SCALE 1/1      |
| FINISH<br>+ + +  |             | SIZE CODE<br>D BS KM11-0-ME   | SHEET 1 OF 3   |
|  |             | <b>digital</b> EQUIPMENT CORPORATION<br>MAYNARD, MASSACHUSETTS<br>TITLE<br><b>MAINTENANCE BOARD (1 of 2)</b><br>NUMBER<br>KM-1<br>REV.      |                |

REV. 10/70 D BS KM11-0-ME

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CONNECTOR AT REAR OF MODULE TO EXTEND MAINTENANCE BOARD 2, W131 (KM-3).

+5V B02A2  
 +8V B02B1  
 ~+8V V2  
 KM-3 M CLK ENABLE L V1  
 KM-3 M CLK L B2  
 KM-2 TIME OUT (OH) B02B2  
 BUS SSYN L A1  
 +5V A1  
 +8V B1  
 B02V2 KM-2 M CLK ENABLE L V1  
 B02U1 KM-2 M CLK L B2  
 B02A1 KM-2 TIME OUT (OH) A1  
 BUS SSYN L U1

KM-2 LAMP BSR 0 L  
 KM-2 LAMP BSR 1 L  
 KM-2 LAMP BSR 3 L  
 KM-2 LAMP BSR 7 L

GND  
 KM-2 LAMP BSR 15 L  
 KM-2 LAMP BSR 14 L  
 KM-2 LAMP BSR 12 L  
 KM-2 LAMP BSR 8 L

KM-2 LAMP ISR 0 L  
 KM-2 LAMP ISR 1 L  
 KM-2 LAMP ISR 3 L  
 KM-2 LAMP ISR 7 L

KM-2 LAMP ISR 10 L  
 KM-2 LAMP ISR 14 L  
 KM-2 LAMP ISR 12 L  
 KM-2 LAMP ISR 8 L

KM-2 LAMP N (1) L  
 KM-2 LAMP Z (1) L  
 KM-2 LAMP V (1) L  
 KM-2 LAMP C (1) L

KM-2 LAMP T (1) L  
 KM-2 LAMP TRAP 5 L  
 KM-2 LAMP B MSYN L  
 KM-2 LAMP B SSYN L

KM-2 LAMP R/W 2 L  
 KM-2 LAMP TST 1 L  
 KM-2 LAMP TST 2 L  
 KM-2 LAMP ISR 2 L

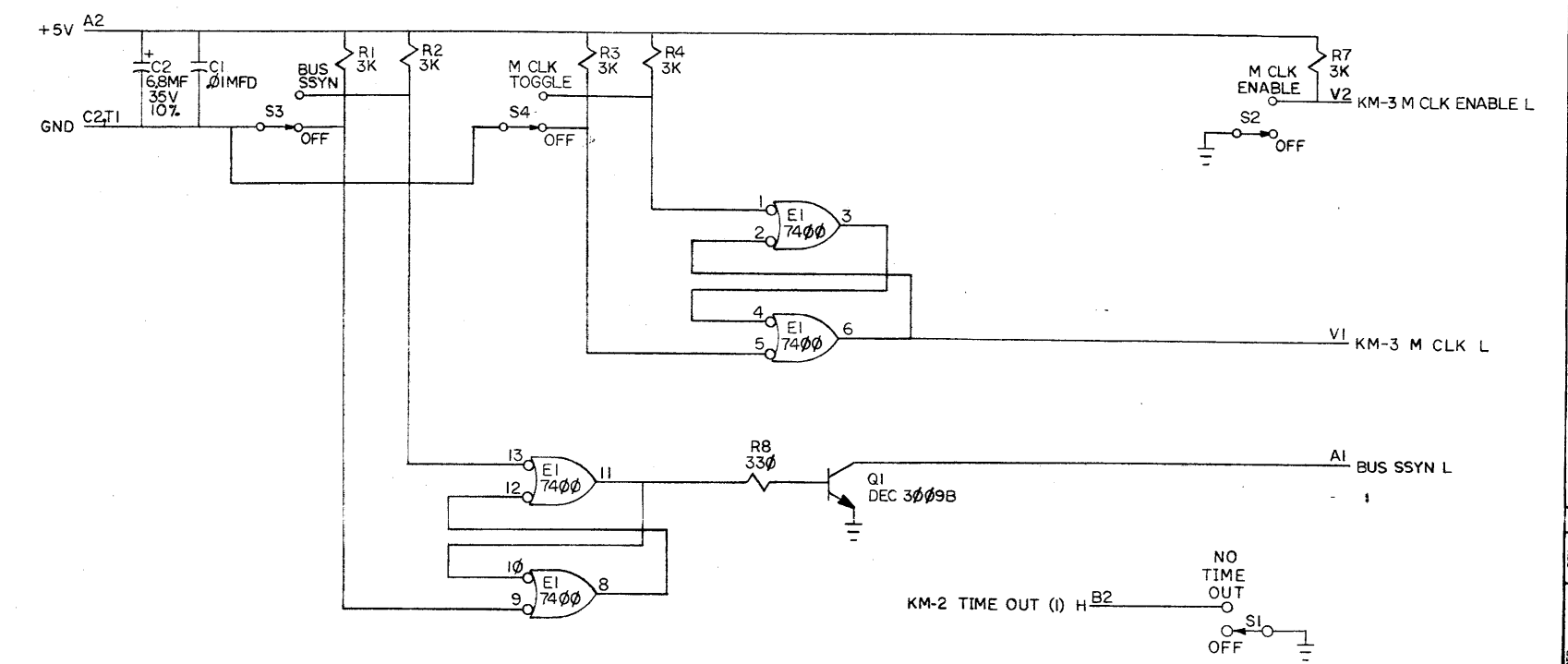
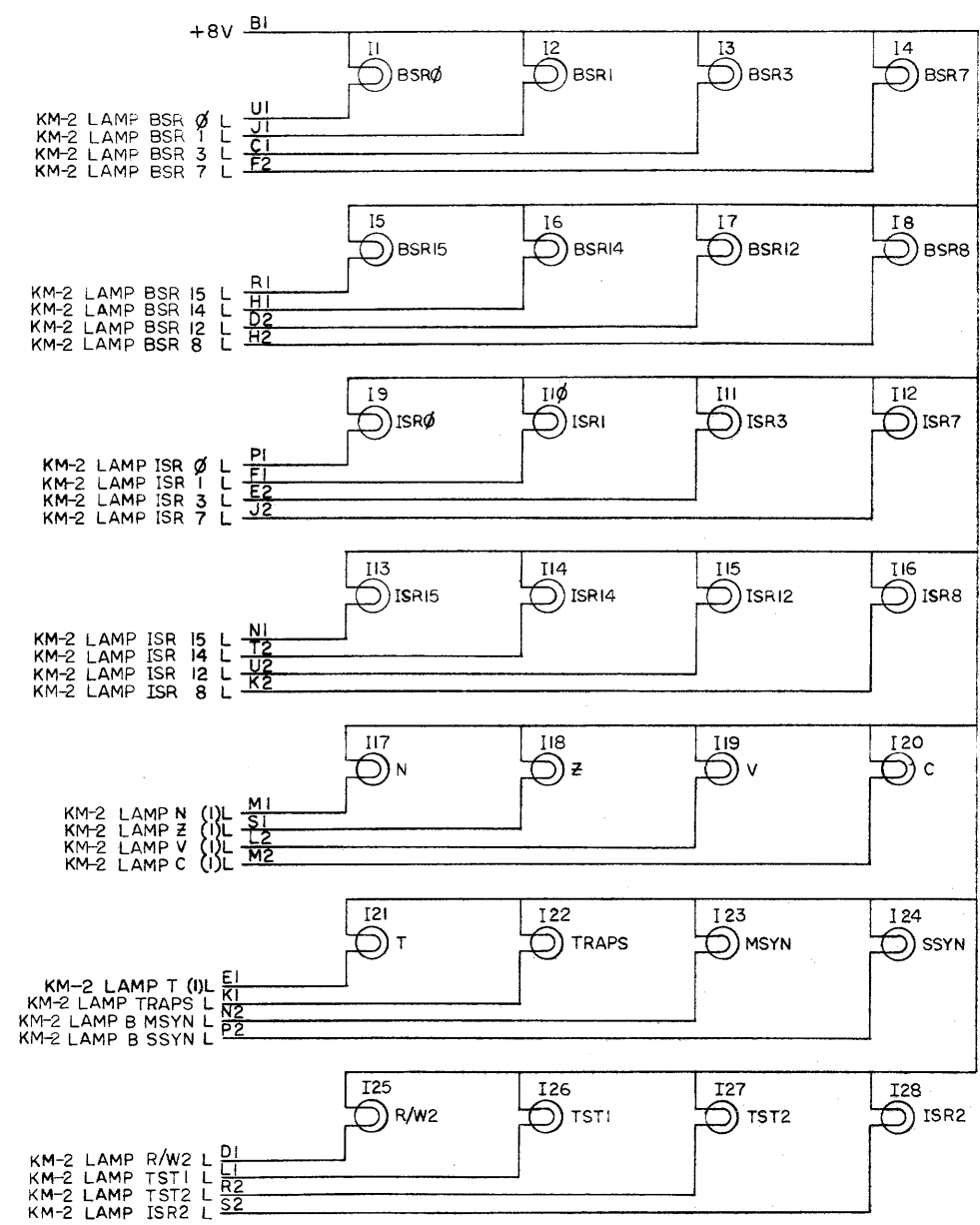
|            |     |
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| REVISIONS  | REV |
| CHANGE NO. |     |
| CHK        |     |

DEC FORM NO. 102A

| FIRST USED ON OPTION/MODEL    | QTY.             | DESCRIPTION   | PART NO. | ITEM NO. |
|-------------------------------|------------------|---|----------|----------|
| PDP 11                        |                  |   |          |          |
| UNLESS OTHERWISE SPECIFIED    |                  |   |          |          |
| DRN: <i>W. Phillips</i>       | DATE: 12-18-69   | PARTS LIST  |          |          |
| CHK'D: <i>W. Phillips</i>     | DATE: 9/25/70    | digital EQUIPMENT CORPORATION<br>MAYNARD, MASSACHUSETTS |          |          |
| ENG: <i>W. Phillips</i>       | DATE: 3-6-70     | TITLE   |          |          |
| PROJ. ENG. <i>W. Phillips</i> | DATE: 3/2/70     | MAINTENANCE BOARD (1)                                   |          |          |
| PROD. <i>W. Phillips</i>      | DATE: 5/5/70     | W130 KM-2   |          |          |
| MATERIAL                      | NEXT HIGHER ASSY | A-ML-KM11-0   |          |          |
| FINISH                        | SCALE NONE       | SIZE CODE NUMBER  |          |          |
|                               | SHEET 2 OF 3     | D BS KM11-0-MB  |          |          |

REV. NUMBER  
 A B C D  
 SIZE CODE  
 D BS KM11-0-MB

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| REV. | CHANGE NO. | REVISIONS |
|------|------------|-----------|
|      |            |           |
|      |            |           |

| FIRST USED ON OPTION/MODEL           | QTY.                          | DESCRIPTION          | PART NO.  | ITEM NO. |
|--------------------------------------|-------------------------------|----------------------|---|----------|
| PDP 11                               |                               |                      |   |          |
| UNLESS OTHERWISE SPECIFIED           | DRN <i>J. Audis</i>           | DATE <i>12/17/69</i> | PARTS LIST  |          |
| UNLESS OTHERWISE SPECIFIED           | CHKD <i>[Signature]</i>       | DATE <i>4/25/70</i>  | digital EQUIPMENT CORPORATION<br>MAYNARD, MASSACHUSETTS |          |
| DIMENSION IN INCHES                  | ENG. <i>[Signature]</i>       | DATE <i>3-6-70</i>   | TITLE<br>MAINTENANCE BOARD(2)                           |          |
| TOLERANCES                           | PROJ. ENG. <i>[Signature]</i> | DATE <i>3-6-70</i>   | W131 KM-3   |          |
| DECIMALS FRACTIONS ANGLES            | PROD. <i>Thaelma</i>          | DATE <i>5/5/70</i>   | NEXT HIGHER ASSEMBLY                                    |          |
| ± .005 ± 1/64 ± 0°30'                |                               |                      | A-M-L-KM11-0  |          |
| FINAL SURFACE QUALITY                |                               |                      | SIZE CODE DBS KM11-0-MB                                 |          |
| REMOVE BURRS AND BREAK SHARP CORNERS |                               |                      | SCALE NONE  |          |
| MATERIAL                             |                               |                      | SHEET 3 OF 3  |          |
| FINISH                               |                               |                      | DIST. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]           |          |