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B-TC-DLV11-Ø-3  
A-PL-DLV11-Ø-Ø  
D-CS-M794Ø-Ø-1  
A-PL-DLV11-Ø-2

UNIT VARIATIONS  
COVERED BY THIS  
PRINT SET

**DLV11**  
**Field Maintenance**  
**Print Set**

**Digital Equipment  
Corporation**  
PRINT SET ORDER NO.  
MP ØØØ55

[illegible]

| REVISIONS            |  |                    |  |                |  |        |  |      |  |
|----------------------|--|--------------------|--|----------------|--|--------|--|------|--|
| DATE                 |  | CHG. NO.           |  | REV.           |  |        |  |      |  |
| 6/76                 |  | DLVII-2            |  | *              |  |        |  |      |  |
| ORIGINATED           |  |                    |  |                |  |        |  |      |  |
|                      |  |                    |  |                |  |        |  |      |  |
|                      |  |                    |  |                |  |        |  |      |  |
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|                      |  |                    |  |                |  |        |  |      |  |
|                      |  |                    |  |                |  |        |  |      |  |
| USED ON OPTION/MODEL |  |                    |  |                |  |        |  |      |  |
| PDP11                |  |                    |  |                |  |        |  |      |  |
|                      |  |                    |  |                |  |        |  |      |  |
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|                      |  |                    |  |                |  |        |  |      |  |
| SHEET 1 OF 1         |  |                    |  |                |  |        |  |      |  |
| DRN.                 |  | HOLZER             |  | DATE           |  | 5-6-76 |  |      |  |
| CHK'D                |  | <i>[Signature]</i> |  | DATE           |  | 5/4/76 |  |      |  |
| PROJ. ENG.           |  | <i>[Signature]</i> |  | DATE           |  | 5/4/76 |  |      |  |
| FIELD SERV.          |  | <i>[Signature]</i> |  | DATE           |  | 5/4/76 |  |      |  |
| TITLE:               |  | SERIAL LINE UNIT   |  |                |  |        |  |      |  |
| SIZE                 |  | CODE               |  | NUMBER         |  |        |  | REV. |  |
| B                    |  | TC                 |  | B-TC-DIV11-0-2 |  |        |  | *    |  |
| DIST.                |  |                    |  |                |  |        |  |      |  |

# DIGITAL EQUIPMENT CORPORATION

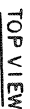
MAYNARD, MASSACHUSETTS

## PARTS LIST

|         |                        |         |                        |              |
|---------|------------------------|---------|------------------------|--------------|
| MADE BY | R. RILEY               | CHECKED | D. HEALY               | SECTION      |
| DATE    | 7/11/75                | DATE    | 9/8/75                 | 1            |
| ENG     | <i>Carroll J. Galt</i> | PROD    | <i>Carroll J. Galt</i> | ISSUED SECT. |
| DATE    | 10/13/75               | DATE    | 10-16-75               | 1            |

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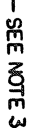
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|------------------|--|----------|--|-------|------|-----------|--|------|---------------------|
| TITLE            |  | ASSY NO. |  | SIZE  | CODE | NUMBER    |  | REV. | ECONO               |
| SERIAL LINE UNIT |  | NONE     |  | A     | PL   | DLV11-Ø-Ø |  | A    | DLV11-Ø-Ø<br>000004 |
| SHEET 1 OF 1     |  |          |  | DIST. |      |           |  |      |                     |

[illegible]

**B.GPSA (VENDCRGE) IS THE ONLY VENDCR PACKAGE MOUNTED WITH THE FLAT REV**

| QTY | REF DESIGNATION     | DESCRIPTION                 | PART NO.   | ITEM NO. |
|-----|---------------------|-----------------------------|------------|----------|
| 31  | C2 THRU 25.27THRU33 | CAPACITOR .01uF 100V+80-20% | 1001610-01 | 8A       |

USE ADHESIVE (ITEM 60) WHERE NECESSARY TO SECURE REWORK WIRES. THE FOLLOWING JUMPER REFERENCE DESIGNATIONS ARE NOT USED: W24, W27 (REPLACED BY RESISTORS R20, R21 PER ECO # M7340-00002). THE FOLLOWING JUMPS MAY BE INSERTED BY MANUFACTURING IN ORDER TO TEST AT 9600 BAUD, BUT WILL BE REMOVED BEFORE FINAL TEST AT 110 BAUD AND SHIPMENT TO CUSTOMER: W2, W22 THRU W24, W30.



|     |                                      |                                  |            |    |
|-----|--------------------------------------|----------------------------------|------------|----|
| 3   | W3, W4, W10, W16, W28, W41, W46, W48 | INSULATED JUMPER WIRE            | 9009185    | 55 |
| 1   |                                      | HANDLE, FLIP CHIP, MAGENTA       | 9008337-6  | 58 |
| 2   |                                      | EYELET                           | 9006732    | 57 |
| 6   |                                      | WIRE 30 AWG BUSS (RETROFIT)      | 9105740-55 | 58 |
| 2   | FR0, R21                             | RESISTOR, 180 $\Omega$ , 1/4W 5% | 1301322    | 53 |
| ADR |                                      | ADHESIVE                         | 4301230    | 66 |

Figure 1 shows the schematic diagram of the proposed circuit. The circuit is powered by a +5V supply and a +12V supply. The +5V supply is connected to the V<sub>DD</sub> pin of the AD2, BD2 and the V<sub>SS</sub> pin of the AD1, BD1. The +12V supply is connected to the V<sub>DD</sub> pin of the AD1, BD1 and the V<sub>SS</sub> pin of the AD2, BD2. The circuit consists of two stages, AD1 and AD2, each with a feedback capacitor C<sub>1</sub> and C<sub>2</sub>. The output of the first stage is connected to the input of the second stage. The output of the second stage is connected to the input of the first stage. The circuit is designed to have a high gain and a high bandwidth.

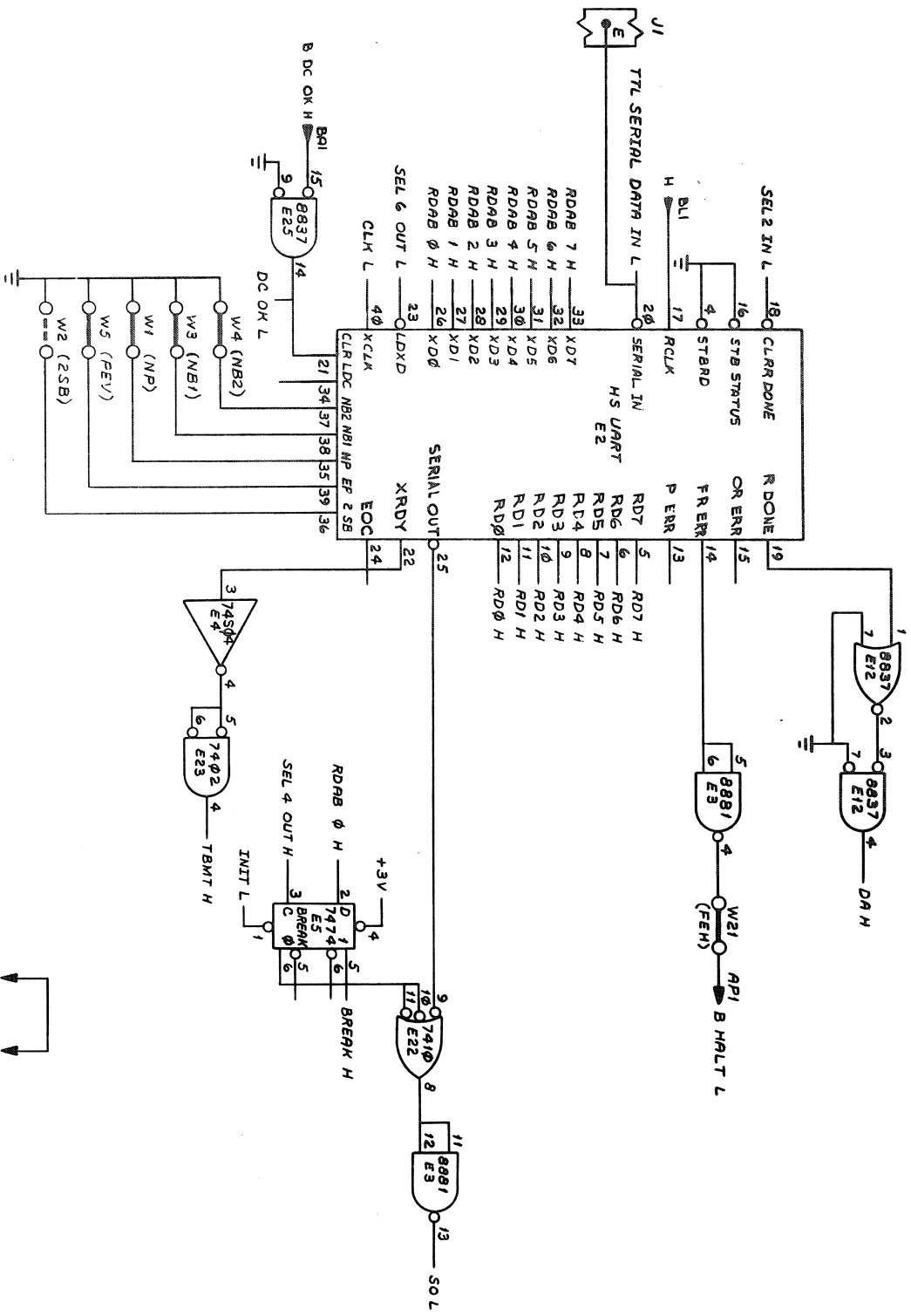
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|     |              |           |      |
|-----|--------------|-----------|------|
|     | D Bennett    | 11 MAR 77 |      |
|     | M. MICHAUD   |           |      |
|     | D Zimmerman  | 5-APR-77  |      |
| 90  | M7940-00005  |           | F    |
|     | D Bennett    | 11/4/77   |      |
|     | D. BENNETT   |           |      |
|     | P. Jones     | 11 JAN 77 |      |
| 90  | M7940-00004  |           | E    |
|     | John G       | 6/7/76    |      |
|     | J.C.R.       |           |      |
|     | H. Zimmerman | 5-2-76    |      |
| 7   | M7940-00003  |           | D    |
|     | John G       | 12/2/76   |      |
|     | JOHN CYR     |           |      |
|     | D. Bennett   | 9/26/76   |      |
| 57  | M7940-00002  |           | C    |
|     | John G       |           |      |
|     | J.C.R.       |           |      |
|     | H. Zimmerman | 7-8-75    |      |
| 100 | M7940-00001  |           | B    |
| CHK | CHANGE NO.   |           | REV. |
|     | REVISIONS    |           |      |

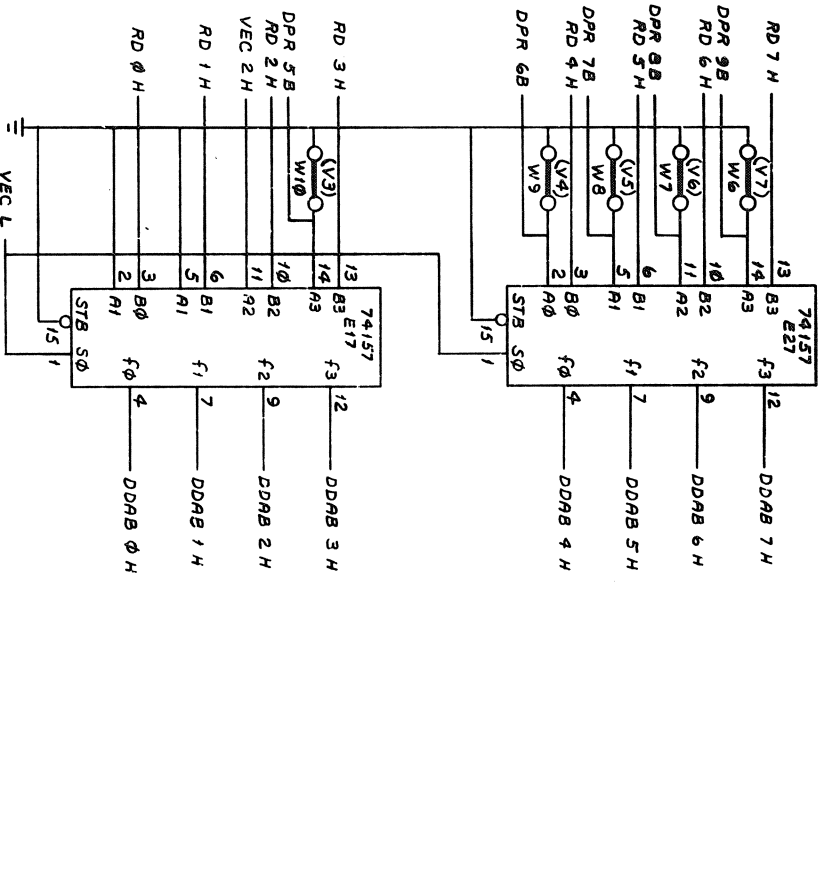
|                  |          |           |         |                  |        |           |         |
|------------------|----------|-----------|---------|------------------|--------|-----------|---------|
| DIGITAL          |          | TITLE     |         | SERIAL           |        | LINE UNIT |         |
| UN.              | 881222-4 | DATE      | 4-18-75 | ENR.             | 1st Lt | DATE      | 4/18/75 |
| CHRG.            | SECRET   | DATE      | 4-18-75 | PRG.             | ENR    | DATE      | 4/18/75 |
| SEC.             | SECRET   | DATE      | 4-18-75 | SEC.             | SECRET | DATE      | 4-18-75 |
| NEXT HIGHER ASST |          |           |         | NEXT HIGHER ASST |        |           |         |
| SCALE            |          |           |         | SCALE            |        |           |         |
| 1 - 4            |          |           |         | 1 - 4            |        |           |         |
| BRIEF            |          |           |         | BRIEF            |        |           |         |
| 1 OF 5           |          |           |         | 1 OF 5           |        |           |         |
| DCS              |          | M7940-0-1 |         | DCS              |        | M7940-0-1 |         |
| F                |          | F         |         | F                |        | F         |         |

|             |     |                  |                              |                                     |            |    |
|-------------|-----|------------------|------------------------------|-------------------------------------|------------|----|
| 9009185     | 53  | REF              | X-Y COORDINATE HOLE LOCATION | K-CG-W/948-B-4                      | 1          |    |
| 9008337-6   | 56  | REF              | ASSY/DRILLING HOLE LAYOUT    | D-AM-W/948-B-5                      | 2          |    |
| 9008732     | 57  | REF              | MODULE ECO HISTORY           | B-AM-W/948-B-6                      | 3          |    |
| 9105740-5-5 | 58  | REF              | ETCHED CIRCUIT BOARD         | 50111558                            | 4          |    |
| 301322      | 59  | 2                | C36, C39                     | CAPACITOR, 330P, 100V, 5%           | 1000009    | 5  |
| 4501230     | 60  | 4                | C41, C45, C46, C47           | CAPACITOR, 330P, 100V, 5%           | 1000023    | 6  |
|             |     | 1                | C26                          | CAPACITOR, 820P, 100V, 5%           | 1000027    | 7  |
|             |     | 31               | C2 THRU C25, C27 THRU C33    | CAPACITOR, .01uf, 50V, +80, -20     | 1001616-00 | 8  |
|             |     | 1                | C44                          | CAPACITOR, 5000 PF, 100V, 20%       | 1001765    | 9  |
|             |     | 4                | C34, C40, C42, C43           | CAPACITOR, 6.8uf, 35V, 10%          | 1005306    | 10 |
|             |     | 4                | C35, C36, C37, C1            | CAPACITOR, .47uf, 25V, 20%          | 1010219    | 11 |
|             |     | 4                | D1, D2, D3, D5               | DIODE, 0664                         | 1100114    | 12 |
|             |     | 2                | D6, D7                       | DIODE, 1N4004                       | 1105796    | 13 |
|             |     | 1                | D4                           | DIODE, 1N759A                       | 1110836    | 14 |
|             |     | 1                | D8                           | DIODE, MCL1381                      | 1105610    | 15 |
|             |     | 1                | J1                           | CONNECTOR, 40 PIN, R.ANG. HEADER 3M | 1201941-02 | 16 |
|             |     | 2                | R4, R5                       | RESISTOR, 47 OHM, 1/4W, 5%          | 1300202    | 17 |
|             |     | 1                | R13                          | RESISTOR, 68 OHM, 1/4W, 5%          | 1300219    | 18 |
|             |     | 1                | R3                           | RESISTOR, 120 OHM, 1/2W, 5%         | 1300243    | 19 |
|             |     | 1                | R15                          | RESISTOR, 150 OHM, 1/4W, 5%         | 1300250    | 20 |
|             |     | 2                | R7, R14                      | RESISTOR, 220 OHM, 1/4W, 5%         | 1300271    | 21 |
|             |     | 1                | R9                           | RESISTOR, 330 OHM, 1/4W, 5%         | 1300295    | 22 |
|             |     | 2                | R10, R11                     | RESISTOR, 270 OHM, 1/2W, 5%         | 1300285    | 23 |
|             |     | 2                | R1, R2                       | RESISTOR, 470 OHM, 1/4W, 5%         | 1300316    | 24 |
|             |     | 1                | R16                          | RESISTOR, 2.4K OHM, 1/4W, 5%        | 1303177    | 25 |
|             |     | 1                | R12                          | RESISTOR, 68K OHM, 1/4W, 5%         | 1301327    | 26 |
|             |     | 1                | R19                          | RESISTOR, 100 OHM, 1/4W, 5%         | 1302229    | 27 |
|             |     | 1                | R9                           | RESISTOR, 10K, 1/4W                 | 1302666    | 28 |
|             |     | 2                | E14, E28                     | RESISTOR NETWORK, 330/680 OHM       | 1510303-02 | 29 |
|             |     | 1                | Q1                           | TRANSISTOR, DEC 65340               | 1510349    | 30 |
|             |     | 1                | Q2                           | TRANSISTOR, MKA55                   | 1510702    | 31 |
|             |     | 1                | Y1                           | XTAL, 2.4576 MHZ                    | 1812396    | 32 |
|             |     | 3                | E5, E31, E33                 | I.C. DEC 7474                       | 1905547    | 33 |
|             |     | 1                | E22                          | I.C. DEC 7410                       | 1905576    | 34 |
|             |     | 1                | E11                          | I.C. DEC 7430                       | 1905578    | 35 |
|             |     | 1                | E23                          | I.C. DEC 7402                       | 1909004    | 36 |
|             |     | 1                | E6                           | I.C. DEC 7493                       | 1909054    | 37 |
|             |     | 1                | E4                           | I.C. DEC 74S04                      | 1910534    | 38 |
|             |     | 3                | E3, E19, E29                 | I.C. DEC 8081                       | 1909105    | 39 |
|             |     | 2                | E21, E32                     | I.C. DEC 7408                       | 1910155    | 40 |
|             |     | 1                | E24                          | I.C. DEC 1488                       | 1910322    | 41 |
|             |     | 1                | E35                          | I.C. DEC 1489                       | 1910323    | 42 |
|             |     | 1                | E20                          | I.C. DEC 74S74                      | 1910544    | 43 |
|             |     | 1                | E9                           | I.C. DEC 74175                      | 1910651    | 44 |
|             |     | 3                | E17, E27, E30                | I.C. DEC 74157                      | 1910655    | 45 |
|             |     | 3                | E8, E12, E25                 | I.C. DEC 8837                       | 1911116    | 46 |
|             |     | 2                | E16, E18                     | I.C. DEC 8641                       | 1911579    | 47 |
|             |     | 2                | E13, E34                     | I.C. DEC 4M26-OI                    | 1911998-OI | 48 |
|             |     | 1                | E1                           | I.C. DEC MH0026C                    | 1912098    | 49 |
|             |     | 2                | E15, E26                     | I.C. DEC 8136                       | 1912395    | 50 |
|             |     | 1                | E10                          | I.C. DEC 74155                      | 1910856    | 51 |
|             |     | 1                | E7                           | I.C. DEC 34702                      | 2112622-00 | 52 |
|             |     | 1                | E2                           | I.C. DEC HSUART (40 PIN)            | 2111450    | 53 |
|             |     | 2                | TP1, TP2                     | SPLIT LUG                           | 9006375    | 54 |
| QTY         | REF | REF. DESIGNATION | DESCRIPTION                  | PART NO.                            | ITEM NO.   |    |

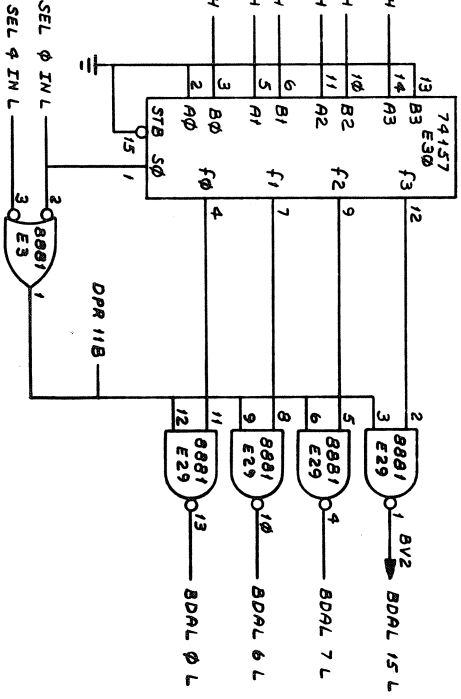
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RR2 RS2



(UART & MULTIPLEXOR LOGIC)



| REV. | CHG. | NO. | REV. |
|------|------|-----|------|
|      |      |     |      |

DC FORM NO. 8

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TITLE SERIAL LINE UNIT DCS M7940-0-1 F

SCALE 1:1 SHEET 2 OF 5

DATE

REV.

NO.

REV.

NO.

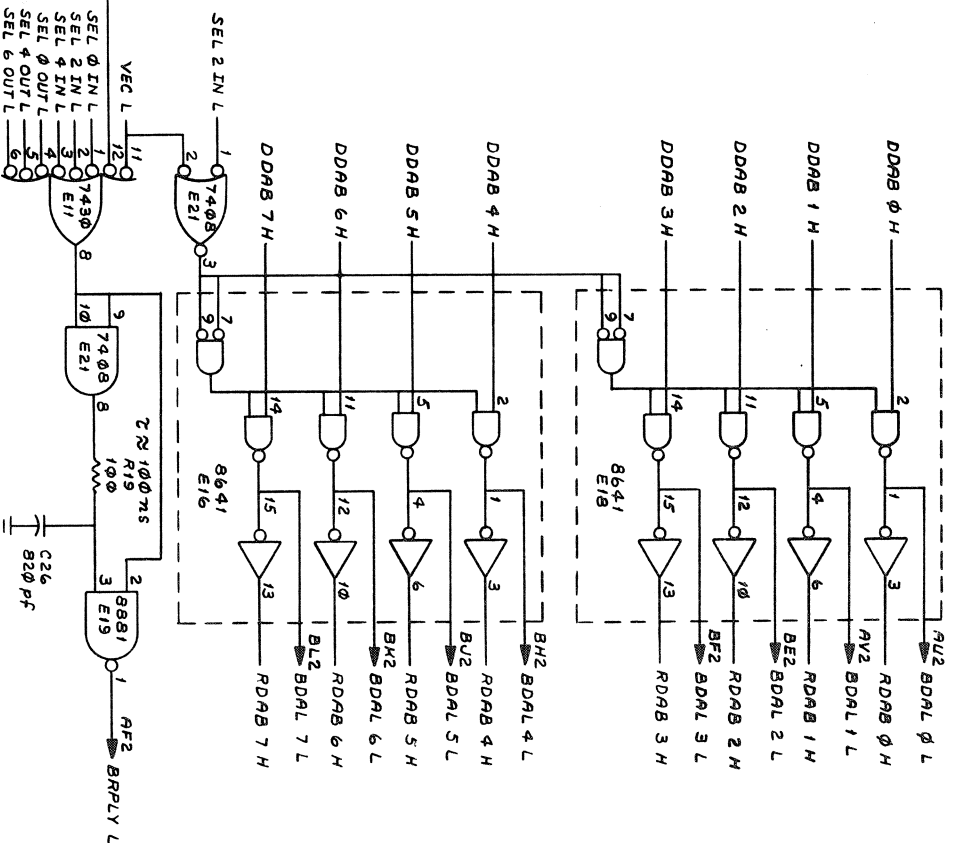
REV.

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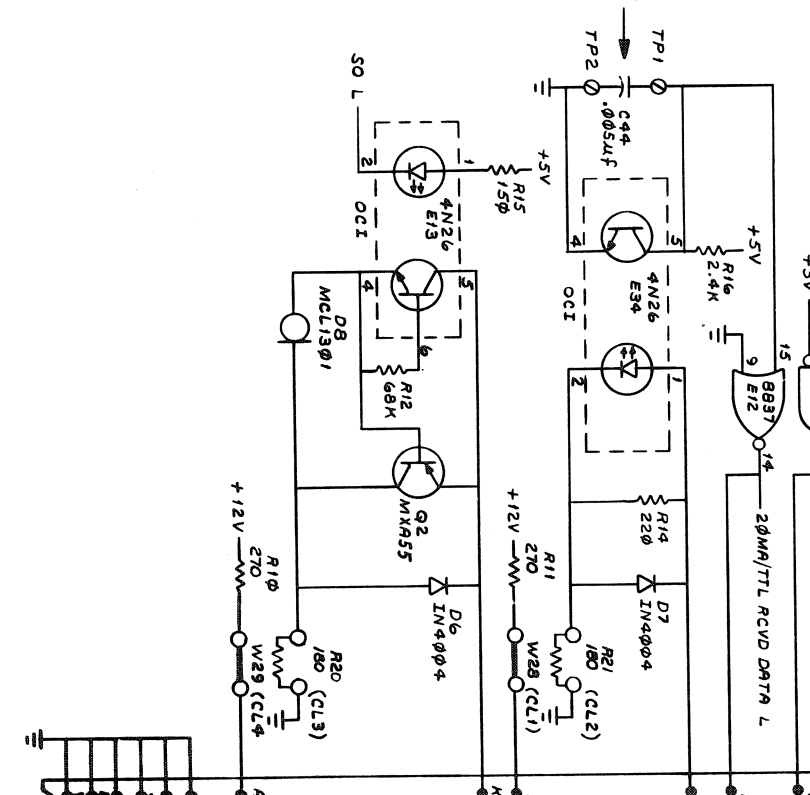
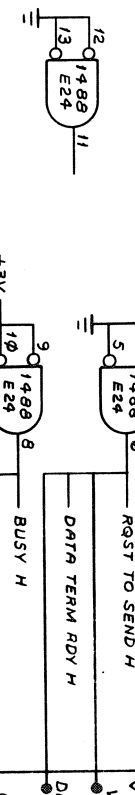
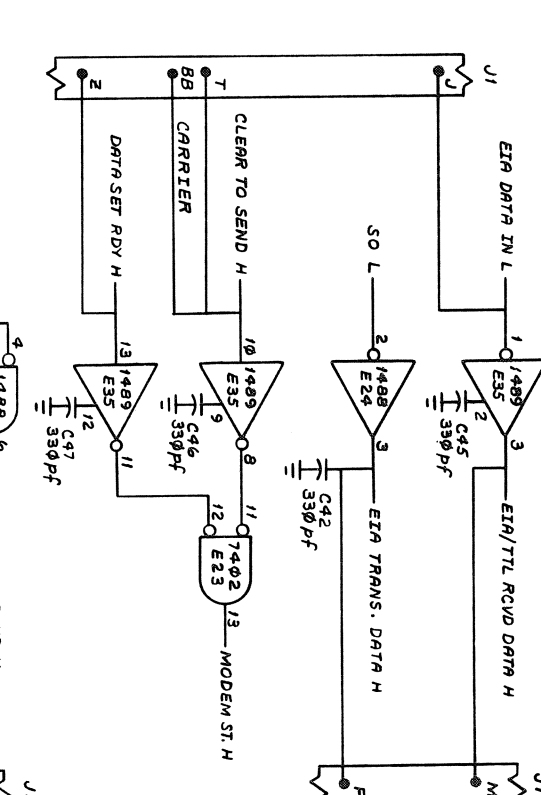
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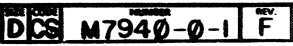
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| SIZE CODE | NUMBER     | REV |
| D CS      | M7940--0-1 | F   |
| DIST.     |            |     |

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| TITLE            | PROJECT CODE | NUMBER   |
|------------------|--------------|----------|
| SERIAL LINE UNIT | DCS          | M7940-0- |

(PERIPHERAL \$ BAUD RATE LOGIC



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|                     |              |           |      |
|---------------------|--------------|-----------|------|
| TITLE               | SIZE CODE    | NUMBER    | REV. |
| SERIAL LINE UNIT    | D CS         | M7940-0-1 | F    |
| SCALE $\frac{1}{4}$ | SHEET 5 OF 5 | DRAW.     |      |

**DIGITAL EQUIPMENT CORPORATION**  
MAYNARD, MASSACHUSETTS

## PARTS LIST

**MADE BY LIZ HAVESH**

DATE 1/19/76

**CHECKED J. SYR**

DATE 27 JAN 76

# SECTION

10

|      |          |
|------|----------|
| DATE | 1/27/76  |
| ENG  | J. L. G. |

|      |           |
|------|-----------|
| PROD | J. SYR    |
| DATE | 27 JAN 76 |

ISSUED SECT.  
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[illegible]

## DESCRIPTION

MP-0054

CUSTOMER PRINT SET DLV111

2 DEC 11-DV KAE-A-PB

DLV11 TEST

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**\*NOTE: These items are shipped with first**

ship to customer.

**TITLE**

ASSY NO.

| SIZE | CODE |
|------|------|
| 1    | 1    |
| 2    | 2    |
| 3    | 3    |
| 4    | 4    |
| 5    | 5    |
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| 7    | 7    |
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| 99   | 99   |
| 100  | 100  |

NUMBER

REV.

ECONOMY

SHIPPING LIST DLV11

SHEET

OF



DIST.

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DEC FORM DEC 16-(325)-1031-N870  
DRA 110

**QUANTITY / VARIATION**