

digital

KM8 - A

Engineering Drawings

Digital Equipment Corporation

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| CUSTOMER PRINT SET | | ELECTRICAL | | | | | CUSTOMER PRINT SET | | MECHANICAL | | | | | | |
|--------------------|----------|------------|-----------------|-----|-----------|-------------------------------|----------------------|----------|------------|----------|--------------|-----|-----------|-------------|----------------------|
| MP-KM8-A | MFG. SET | FIND NO. | DRAWING NO. | REV | NO OF SHT | DESCRIPTION | OPTION NO./FILE DATE | MP-KM8-A | MFG. SET | FIND NO. | DRAWING NO. | REV | NO OF SHT | DESCRIPTION | OPTION NO./FILE DATE |
| X | | 1 | A-SP-KM8-A-1 | * | 2 | FIELD INST. & ACCEPT. PROC. | | X | | 1 | A-PL-KM8-A-0 | * | 1 | PARTS LIST | |
| X | | | A-PL-KM8-A-2 | * | 1 | SHIPPING LIST | | | | | | | | | |
| X | | | A-PL-KM8-A-3 | * | 1 | SOFTWARE LIST | | | | | | | | | |
| X | | | D-TD-KM8-A-4 | * | 1 | AUTO REST./BOOT START-UP SEQ. | | | | | | | | | |
| X | | | D-TD-KM8-A-5 | * | 1 | BOOTSTRAP TIMING DIAGRAM | | | | | | | | | |
| X | | | D-FD-KM8-A-6 | * | 2 | MEMORY EXT FLOW DIAGRAM | | | | | | | | | |
| X | | | A-SP-KM8-A-7 | * | 4 | ROM PROGRAMMING DIRECTIONS | | | | | | | | | |
| | | | A-SP-KM8-A-8 | | 8 | ENG. SPECS | | | | | | | | | |
| X | | 2 | D-CS-M8317-0-1 | # | 7 | 8A INTERNAL OPTION #2 | M8317 | | | | | | | | |
| | | | K-CO-M8317-0-4 | # | 1 | X-Y COORDINATE HOLE LOCATION | | | | | | | | | |
| | | | D-AD-M8317-0-5 | # | 1 | ASSY/DRILLING HOLE LAYOUT | | | | | | | | | |
| | | | B-MH-M8317-0-6 | # | 1 | MODULE HISTORY | | | | | | | | | |
| X | | | K-RL-M8317-0-8 | # | 2 | ROM PATT. SPEC. | | | | | | | | | |
| X | | | K-RL-M8317-0-9 | # | 9 | ROM PATT. SPEC | | | | | | | | | |
| X | | | K-RL-M8317-0-10 | # | 9 | ROM PATT. SPEC | | | | | | | | | |
| X | | | K-RL-M8317-0-11 | # | 9 | ROM PATT. SPEC | | | | | | | | | |

CUSTOMER PRINT SET CODES
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE: 8A INTERNAL OPTION #2
SHEET 2 OF 2
SIZE CODE: B DD
NUMBER: KM8-A
REV:

TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR KM8-A

IV ACCEPTANCE PROCEDURE (continued)

Equipment required:

1. PDP-8A with 1K min. R/W Memory
2. Paper Tape Input Device
3. Diagnostic and Listings
4. Programmer's Console (KC8-A & DKC8-A)
5. W987 Quad Extender

NOTE: If the programmer's console and paper tape input device are not available as part of the system being used, they must be supplied in good working order by the customer.

TABLE A

Acceptance of KM8A with 4K of R/W Memory

| <u>Program Name</u> | <u>Maindec #</u> | <u>Accept Time</u> | <u>Restrictions</u> |
|---------------------|------------------|--------------------|----------------------|
| KM8A Option Test #2 | 08-DJKMA-PB | 30 min | 4K R/W Memory Min |

Acceptance of KM8A with Less than 4K R/W Memory

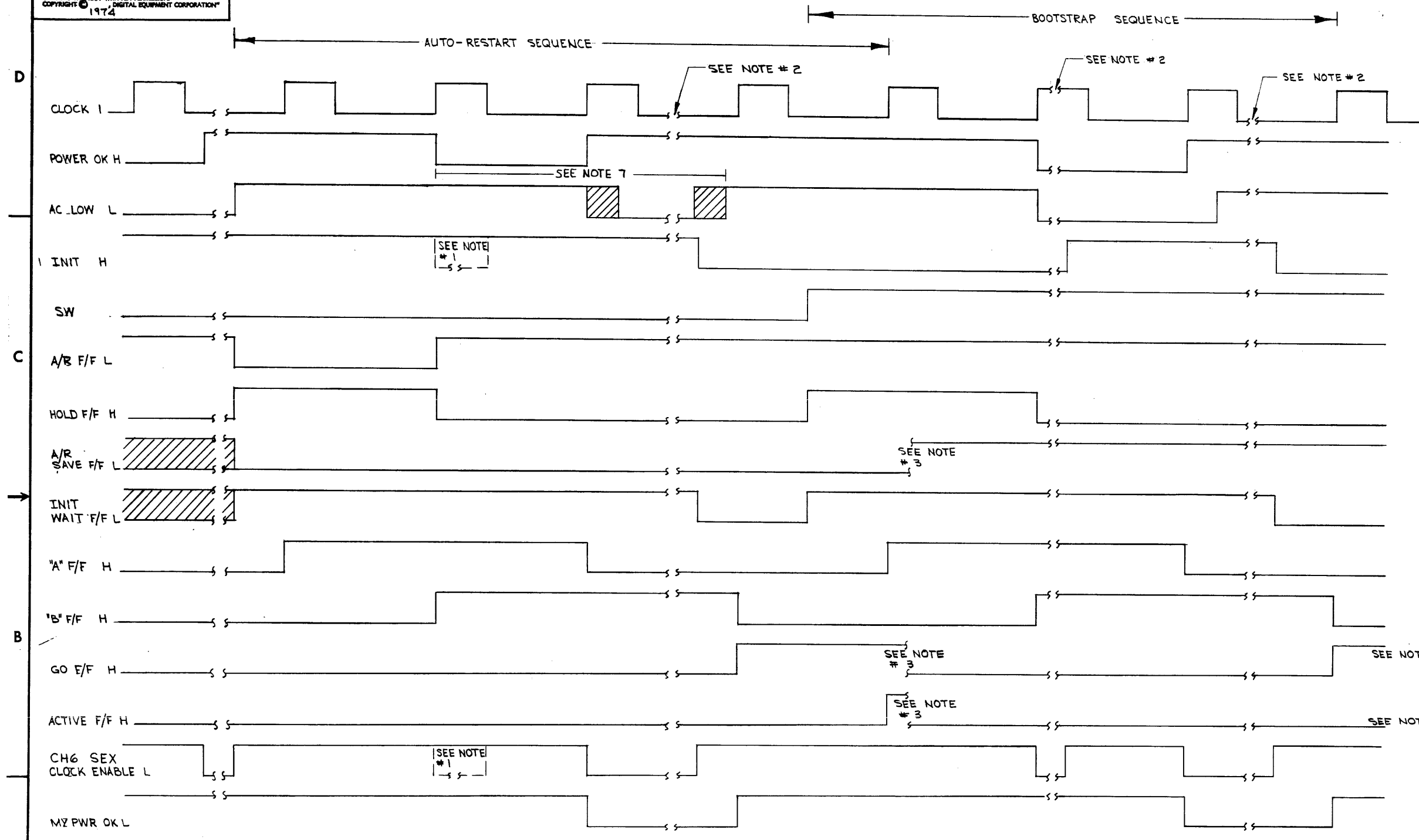
| | | | |
|---|---------------|--------|----------------------|
| KM8A Option Test #2 Segment #1 (RIM) | 08-DJKMA -PM1 | 10 min | 1K R/W memory min |
| KM8A Option Test #2 Segment #2 (RIM) | 08-DJKMA -PM2 | 10 min | 1K R/W Memory Min |
| KM8A Option Test #2 Segment #4 (RIM) | 08-DJKMA -PM4 | 10 min | 1K R/W Memory Min |

| SIZE | CODE | NUMBER | REV |
|------|------|---------|-----|
| A | SP | KMS-A-1 | |

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REV. NUMBER
DITD KM8-A-4

- NOTES:
1. CLOCK ENABLE MAY BE FALSE AT THIS TIME, IF INIT H IS FALSE. CLOCK ENABLE THEN RETURNS HIGH (ASSERTED) WHEN INTN BECOMES TRUE
 2. THE LOGIC WAITS FOR INITIALIZE TO START OR END BEFORE CONTINUING
 3. THESE FLIP-FLOPS ARE CLEARED AT THE CONCLUSION OF THE AUTO RESTART CYCLE
 4. ACTIVE SETS ON THE NEXT CLOCK PULSE THEN CLEARS AT THE END OF THE CYCLE
 5. GO F/F CLEARS AT THE END OF CYCLE
 6. SEE D-FD-KM8-A FOR DETAILED TIMING DATA AFTER ACTIVE IS SET
 7. THE SWITCHING TIMES FOR AC LOW ARE A FUNCTION OF THE SLEW RATE OF THE CIRCUITS IN THE POWER SUPPLY



| | |
|------|--|
| REV. | |
| CHG | |
| CHK | |

| | | | | |
|---|--|-------------------|-----------|----------|
| FIRST USED ON OPTION/MODEL PDP8-A | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
| PARTS LIST | | | | |
| DIMENSIONAL TOLERANCE | | DRWG | DATE | |
| DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED | | CHKD | DATE | |
| MILLIMETERS | INCHES | ANGLS | DATE | |
| X.XX ±0.10 | .XX ±0.005 | 40° 30' | DATE | |
| X.X ±0.05 | .X ±0.002 | | DATE | |
| X ±.2 | .X ±.1 | | DATE | |
| THIRD ANGLE PROJECTION | REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓ | ENG | DATE | |
| | | PROJ. ENG. | DATE | |
| | | PROD. | DATE | |
| | | NEXT HIGHER ASSY. | | |
| | MATERIAL | B-DD-KM8-A | SIZE CODE | NUMBER |
| | FINISH | | DITD | KM8-A-4 |
| | | SCALE | | |
| | | SHEET | OF | |
| | | DIST. | | |

digital

TITLE
AUTO RESTART/
BOOTSTRAP START-
UP SEQUENCE

REV. NUMBER
DITD KM8-A-4

B

A

8

7

6

5

4

3

2

1

8

7

6

5

4

3

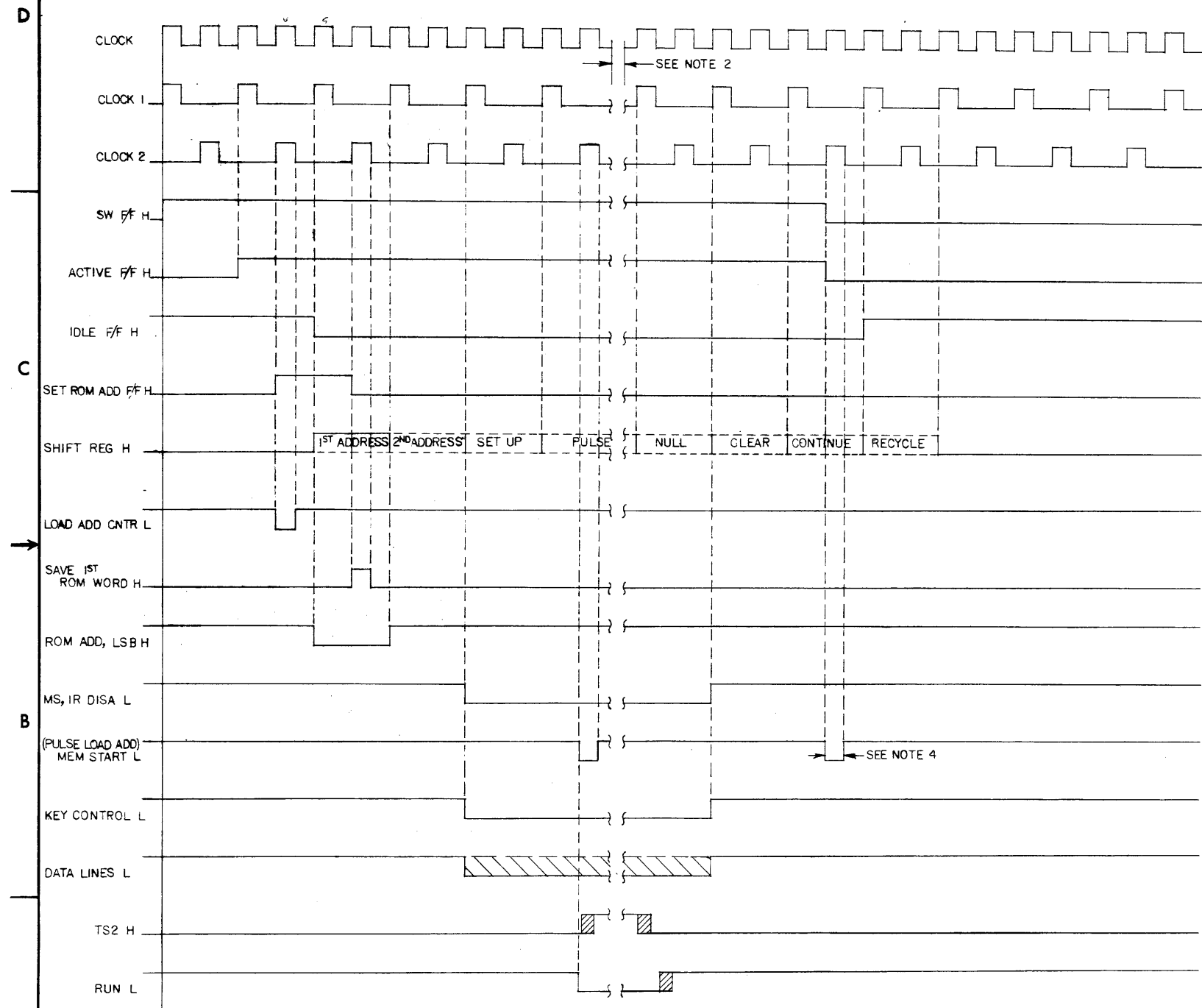
2

1

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REV. 2
 SIZE CODE DTD
 NUMBER KMS-A-5
 1

- NOTES:
- ONE "DEPOSIT" CYCLE IS SHOWN IN DIAGRAM.
 - WHEN "RUN" IS TRUE (LOW) ALL TIMING IS HELD OFF UNTIL THE NEXT CLOCK PULSE AFTER "RUN" GOES FALSE (HIGH).
 - FOR THE "LOAD ADD" CYCLE SIGNALS REMAIN THE SAME AS SHOWN EXCEPT THAT "PULSE LOAD ADD" REPLACES "MEM START" AND "KEY CONTROL" IS NEGATED. FOR "EXT. LOAD ADD" KEY CONTROL IS TRUE.
 - MEM START APPEARS HERE ONLY FOR THE "START" FUNCTION. THE EARLIER MEM START IS FOR "DEPOSITS" ONLY.

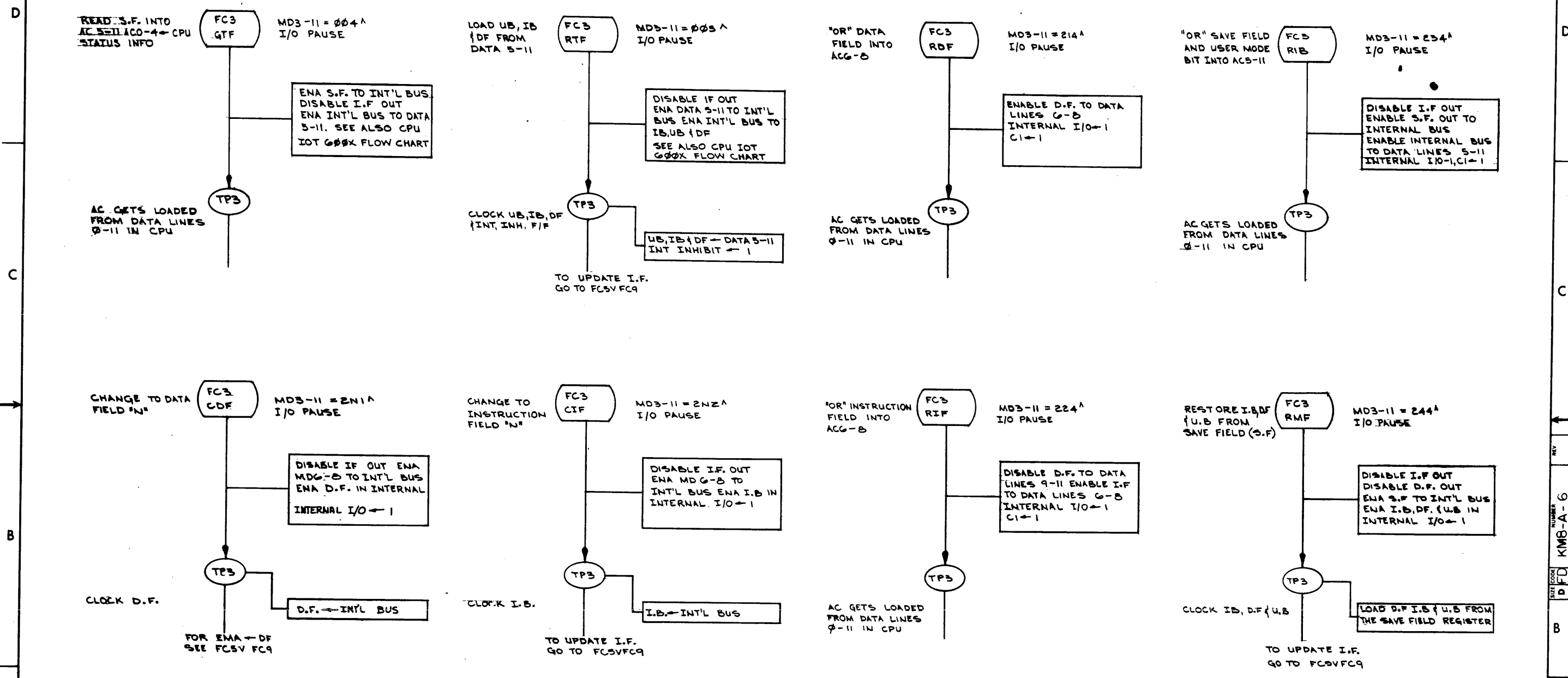


| | |
|------------|--|
| REV. | |
| CHG | |
| CHK | |
| REVISIONS | |
| CHANGE NO. | |

| | | | | | |
|--|----------------------------------|--|------------------------------------|-----------------------------------|----------|
| FIRST USED ON OPTION/MODEL PDP8-A | | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
| PARTS LIST | | | | | |
| DIMENSIONAL TOLERANCE | | DRN | DATE | | |
| DIMENSIONS ARE MILLIMETERS INCHES UNLESS OTHERWISE SPECIFIED | | CHK'd | DATE | | |
| MILLIMETERS | INCHES | ENG. | DATE | | |
| X.XX ±0.10 XX ±0.5 X ±2. | .XXX ±.005 .XX ±.02 .X ±.1 | PROJ. ENG. SALES PROD. | DATE 1-8-75 1-8-75 1-8-75 | | |
| THIRD ANGLE PROJECTION | | REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY | | TITLE BOOTSTRAP TIMING DIAGRAM | |
| MATERIAL | | NEXT HIGHER ASSY. | | SIZE CODE NUMBER REV. | |
| FINISH | | B-DD-KMS-A | | D TD KMS-A-5 | |
| | | SCALE 1:1 | | SHEET 1 OF 1 | |

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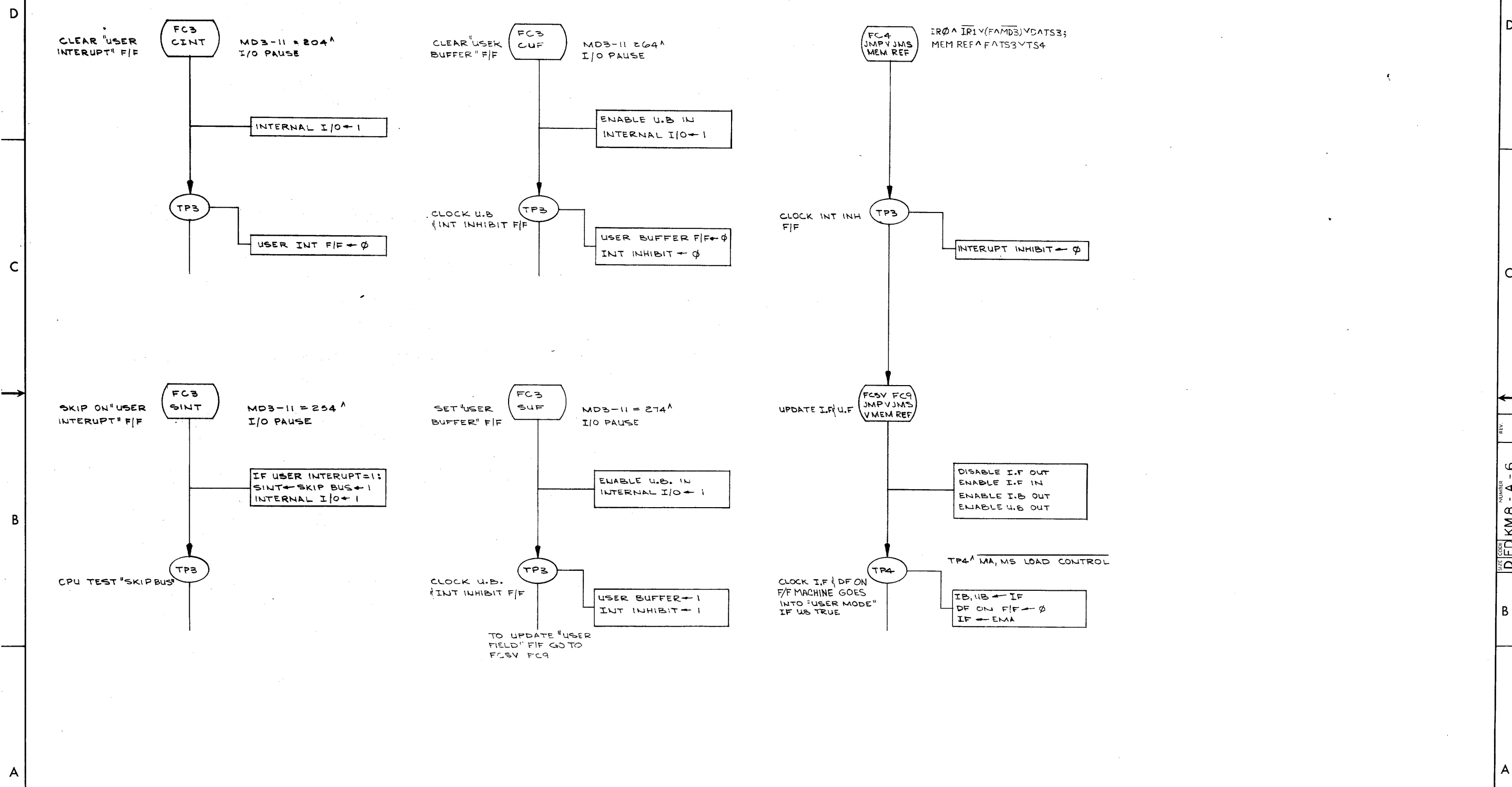
REV. 9-A-6
 SIZE CODE
 NUMBER
 DFD KMB-A-6



| | |
|------------|--|
| REV. | |
| CHANGE NO. | |
| CHK | |

| | | | | |
|--------------------------------------|------------------|-------------|---|----------|
| FIRST USED ON OPTION MODEL | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
| PDP8A | | | | |
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED | DRN. | DATE | digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS | |
| UNLESS OTHERWISE SPECIFIED | DATE | DATE | TITLE | |
| DIMENSION IN INCHES | 12/27/74 | 12/27/74 | FLOW CHART FOR | |
| TOLERANCES | | | OPTION BOARD #2 | |
| DECIMALS FRACTIONS ANGLES | | | M8317 | |
| ± .005 ± 1/64 ± 0°30' | | | SIZE CODE NUMBER REV. | |
| FINAL SURFACE QUALITY | | | DFD KMB-A-6 | |
| REMOVE BURRS AND BREAK SHARP CORNERS | | | SCALE | |
| MATERIAL | NEXT HIGHER ASSY | | SHEET 1 OF 2 | |
| FINISH | B-DD-KMB-A | | DIST. | |

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| REVISIONS | | |
|-----------|-----------|-----|
| CHK | CHANGE NO | REV |
| | | |

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**DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS**

ENGINEERING SPECIFICATION

DATE 5/8/74

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AB (M8317-YA)

REVISIONS

| REV | DESCRIPTION | CHG NO | ORIG | DATE | APPD BY | DATE |
|-----|---------------|--------|---------|-----------|----------|--------|
| A | E.C.O. CHANGE | 00001 | L.NARHI | 14 MAY 76 | L. Narhi | 21-MAY |

| | | | | | | |
|--------------------|----------------------------|----------|-----------|------------|-------------------|----------|
| ENG Larry Narhi | APPD <i>Larry Narhi</i> | 12/24/74 | SIZE A | CODE SP | NUMBER KM8-A-7 | REV A |
|--------------------|----------------------------|----------|-----------|------------|-------------------|----------|

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AB (M8317-YA)

1. Introduction

This document describes the organization of the two 256 x 4 ROMs, hereafter called ROM #1 and ROM #2, that control and supply data for the Auto-Restart and Bootstrap portions of Option Board #2.

This information is made available to help users program their own ROMs for their specific Auto-Restart and/or Bootstrap program(s).

2. Organization

The two ROMs are connected as follows: the address lines are connected in parallel; i.e., two corresponding address lines of each ROM are connected together, the outputs are arranged in serial fashion forming an 8 bit word, 4 outputs from each ROM. Because 12 bits are required for data/address information, two sequential addresses must be accessed from the ROMs to form a 16 bit word. Where the first 8 bits are temporarily stored in a register, then the next 8 bits are accessed from the ROMs. At this point the control then decides what to do with 12 of the 16 bits. There are four possible actions that can take place at this time:

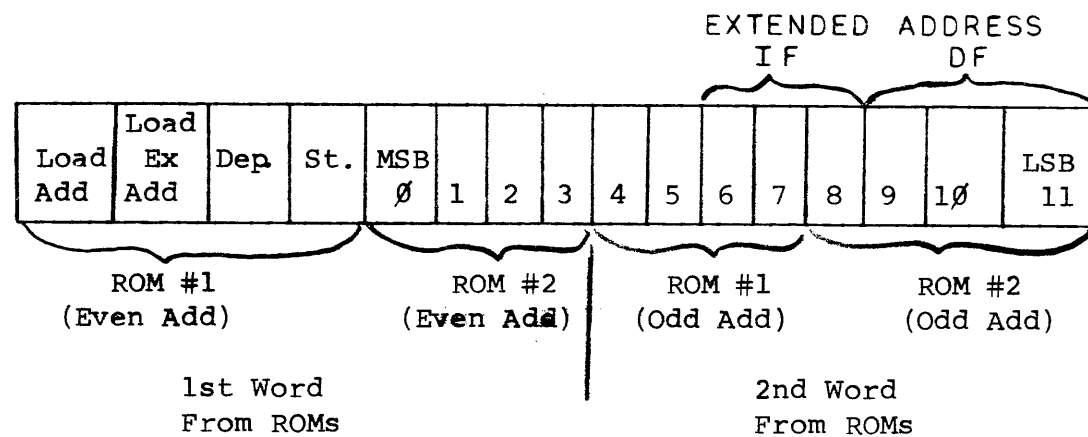
- a) Load Address
- b) Load Extended Address, IF AND DF
- c) Deposit
- d) Start

The remaining 4 bits of the 16 actually tell the control which of the four actions are to take place. So the 16 bit word would look like the word in Figure 1.

| | | | |
|-----------|------------|-------------------|----------|
| SIZE A | CODE SP | NUMBER KM8-A-7 | REV A |
|-----------|------------|-------------------|----------|

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AB (M8317-YA)

Figure 1



The use of ROMs that have 256 addressable locations allows up to 128 words of ROM storage. These 128 locations may be used for Bootstrap and/or Auto-restart programs. Any Auto-restart or Bootstrap program may be located anywhere in the ROMs so long as the program starts in an even address in the ROM. If it is required that both Bootstrap and Auto-restart programs be accessible at the same time, activated by different signals; of course the Auto-restart program(s) must be located in addresses 0 through 15 in the ROMs. This is due to the addressing limits of the Auto-restart select switches.

3. Auto-Restart/Bootstrap Sequence

The following events should take place when an auto-restart is initiated:

- a) Load a 12 bit address
- b) LOAD THE IF AND DF AND START.

The following events should take place when the Bootstrap is initiated:

- a) Load a 12 bit initial address.
- b) Load the IF AND DF
- c) Deposit 12 bit data words repeating as required by length of program to be deposited.
- d) Load a 12 bit starting address and start.

| | | | |
|------|------|---------|-----|
| SIZE | CODE | NUMBER | REV |
| A | SP | KM8-A-7 | A |

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AB (M8317-YA)

The decision to do a Bootstrap or an auto-restart is directed by a set of switches on the module. The Bootstrap may be actuated by the transition of the signal AC Low from a logic low to a logic high or by a similar transition of the SW line on the OMNIBUS.

AN AUTO-RESTART MAY ONLY BE INITIATED BY THE AC LOW SIGNAL. IT SHOULD BE OBVIOUS THAT BOTH THE BOOTSTRAP OR AUTO-RESTART SHOULD NOT BE ACTIVATED BY THE SAME INITIALIZING SIGNAL.

4. ROM Programming Examples

Auto-restart example:

- a) Load address 0200
- b) Load field 0, start

Starting at ROM address 004

Bootstrap example:

- a) Load address 0023
- b) Load field 7 (BOTH IF AND DF)
- c) Deposit 2000
- d) Deposit 6745
- e) Deposit 0023
- f) Deposit 7650
- h) Deposit 5024
- j) Deposit 6733
- k) Deposit 5031
- l) Load address 0024 and start

Starting at ROM address 124.

| | | | |
|------|------|---------|-----|
| SIZE | CODE | NUMBER | REV |
| A | SP | KM8-A-7 | A |

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AB (M8317-YA)

Auto-Restart example:

| Bit Add | ROM #1 | | | | ROM #2 | | | |
|------------|--------|---|---|---|--------|---|---|---|
| | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 |
| 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Load Address
0200
Load Ext. Add 0
and Start

NOTE: Logic one (1) = +3V

Bootstrap example:

| Bit Add | ROM #1 | | | | ROM #2 | | | |
|------------|--------|---|---|---|--------|---|---|---|
| | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 |
| 124 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| 126 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 127 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 130 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 132 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| 133 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| 134 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 135 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| 136 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 |
| 137 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 140 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 141 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| 142 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| 143 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| 144 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 145 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 146 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 147 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |

Load Add 0023
Load Ext Add 7
Dep 2000
Dep 6745
Dep 0023
Dep 7650
Dep 5024
Dep 6733
Dep 5031
Load Add 24 & Start

SIZE **A** CODE SP NUMBER KM8-A-7 REV **A**

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AB (M8317-YA)

5. ROMs

Unprogrammed ROMs should be purchased by the user from Digital Equipment Corporation. The part number for an unprogrammed 256 x 4 ROM is 23-000A2.

SIZE **A** CODE SP NUMBER KM8-A-7 REV **A**

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| DESIRED FUNCTION | ACTIVATING SIGNAL | S1-4 | S1-5 | S1-6 | S1-7 | S1-8 | S2-1 |
|-----------------------|-----------------------|------|-------|------|------|------|------|
| BOOTSTRAP ENABLED | "BOOT" SW. | * | ↑ | OFF | OFF | ON | N/A |
| AUTO-RESTART DISABLED | N/A | | | | | | |
| BOOTSTRAP ENABLED | "BOOT" SW | * | | ON | ON | ON | N/A |
| AUTO-RESTART ENABLED | "AC LOW" | * | | ON | ON | ON | N/A |
| BOOTSTRAP DISABLED | N/A | * | SHAKE | ON | ON | OFF | N/A |
| AUTO-RESTART ENABLED | "AC LOW" | * | | ON | ON | OFF | N/A |
| BOOTSTRAP ENABLED | "AC LOW" | * | | ON | OFF | OFF | N/A |
| AUTO-RESTART DISABLED | N/A | * | | ON | OFF | OFF | N/A |
| BOOTSTRAP ENABLED | "AC LOW" OR "BOOT" SW | * | | ON | OFF | ON | N/A |
| AUTO-RESTART DISABLED | N/A | * | | ON | OFF | ON | N/A |
| TIME SHARE DISABLED | N/A | N/A | N/A | N/A | N/A | N/A | ON |
| TIME SHARE ENABLED | N/A | N/A | N/A | N/A | N/A | N/A | OFF |

| RESTART ADDRESS | S2-2 | S2-3 | S2-4 |
|-----------------|------|------|------|
| 0 | OFF | OFF | OFF |
| 2000 | OFF | ON | OFF |
| 2000 | ON | OFF | OFF |
| 4200 | ON | ON | OFF |

4. AUTO-RESTART SELECT SWITCHES ARE DEFINED AS FOLLOWS:
- (a) ROM ADDRESS RANGE: 0-16
 - (b) ON = LOGIC 1 OR LOW; OFF = LOGIC 0 OR HIGH
 - (c) ORDER OF SIGNIFICANCE
- $S_2 2 = 2^3 = 10$
 $S_2 3 = 2^2 = 4$
 $S_2 4 = 2^1 = 2$

NOTES:

- * S1-4 "OFF" - BOOTSTRAP CAN BE ACTIVATED BY "BOOT" SW EITHER IN THE "RUN" OR "STOP" STATE
- S1-4 "ON" - BOOTSTRAP CAN ONLY BE ACTIVATED BY "BOOT" SW IN THE "RUN" STATE
- 1. "AC LOW" WILL CAUSE AUTO-RESTART OR BOOTSTRAP, DEPENDING ON SWITCH SETTINGS, TO OCCUR ONLY IN THE "RUN" OR STOPPED STATE
- S1-6, 7, 8 "OFF" - BOOTSTRAP & AUTO-RESTART DISABLED
- 2. E82 & E8T ARE NOT ON THE YA VARIATION. ALL OTHER PARTS REMAIN THE SAME
- 3. IF AUTO-RESTART IS ENABLED, THE AUTO-START FEATURE OF THE CPU (M8315) MUST BE DISABLED

| PROGRAM | S2-5 | S2-6 | S2-7 | S2-8 | S1-1 | S1-2 | S1-3 | ROM ST ADD | MEM ADD START |
|--------------|------|------|------|------|------|------|------|------------|---------------|
| HI-LO PT RDR | ON | ON | ON | OFF | ON | ON | ON | 20 | 7734 |
| RKBE | ON | OFF | ON | OFF | ON | OFF | ON | 124 | 24 |
| RXBE | ON | OFF | OFF | ON | OFF | ON | ON | 150 | 33 |
| RF00/DF32D | OFF | ON | OFF | ON | OFF | ON | OFF | 252 | 7750 |
| TABE | OFF | ON | OFF | OFF | OFF | ON | OFF | 272 | 4000 |

3. BOOTSTRAP SELECT SWITCHES ARE DEFINED AS FOLLOWS:
- (a) ROM ADDRESS RANGE: 0-377
 - (b) ON = LOGIC 0 OR LOW; OFF = LOGIC 1 OR HIGH
 - (c) ORDER OF SIGNIFICANCE
- $S_2 5 = 2^7 = 200$ (MSB)
 $S_2 6 = 2^6 = 100$
 $S_2 7 = 2^5 = 40$
 $S_2 8 = 2^4 = 20$
 $S_1 1 = 2^3 = 10$
 $S_1 2 = 2^2 = 4$
 $S_1 3 = 2^1 = 2$

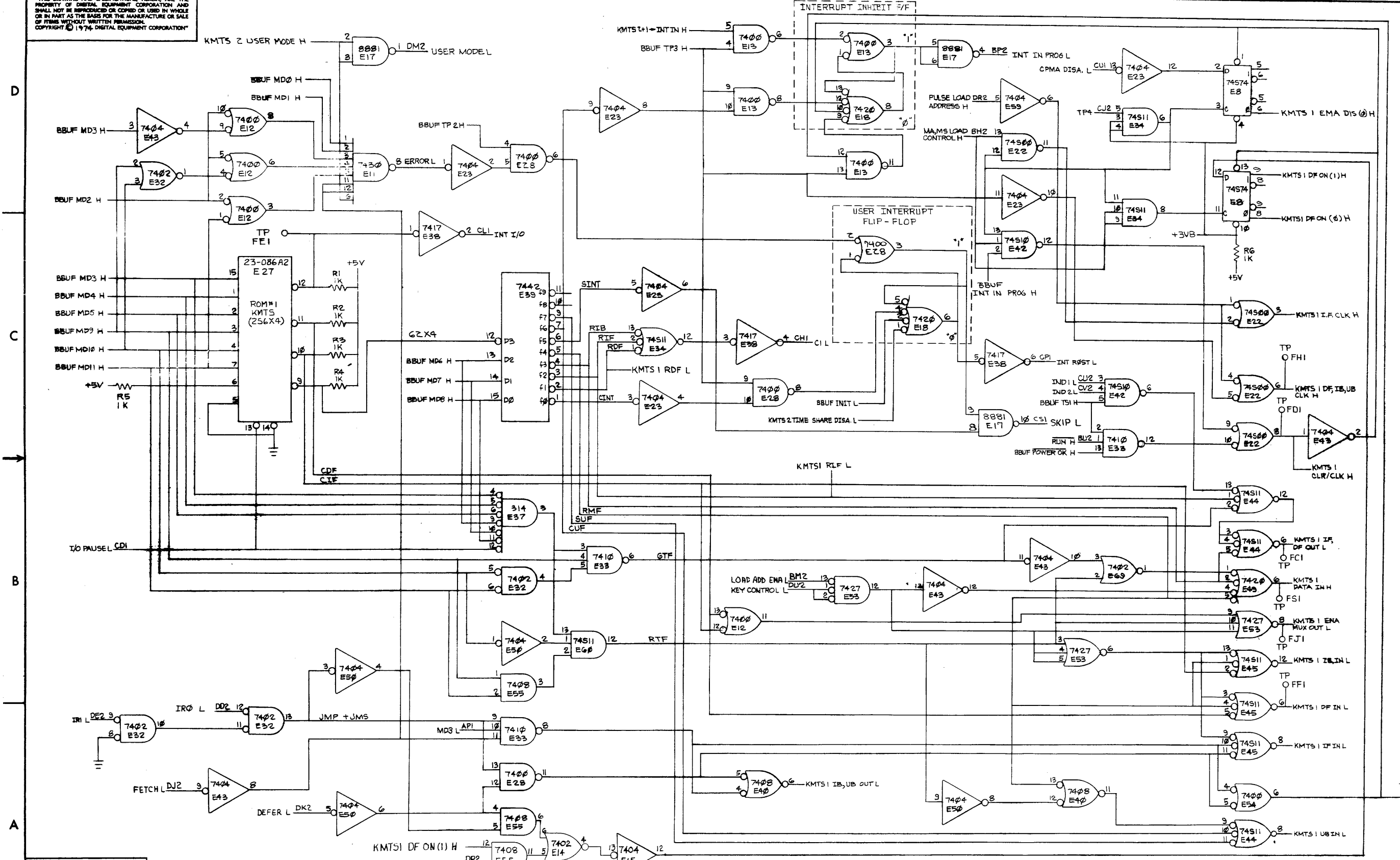
THE LSB OF ADDRESS IS CONTROLLED BY THE BOOTSTRAP/AUTO-RESTART LOGIC

| PART CALLED FOR | | SUBSTITUTE PART | |
|-----------------|------------------------|-----------------|-------------------------|
| QTY | PART NO. DESCRIPTION | QTY | PART NO. DESCRIPTION |
| 95 | 1001610-01 .01MFD DISC | 95 | 1001610-00 .01MFD GLASS |
| 3 | 1503100 DEC 3009B | 3 | 1509338 DEC 6531 |
| 6 | 1911330 74173 | 6 | 1911711 8T10 |
| 1 | 1909704 314 | 1 | 1910391 5314 |
| | | 1 | 1909972 6314 |
| | | 1 | 1910389 7314 |
| 6 | 1909705 8881 | 6 | 1909973 97401 |

| CHK | CHANGE NO. | REV. |
|-----|------------|------|
| | | |

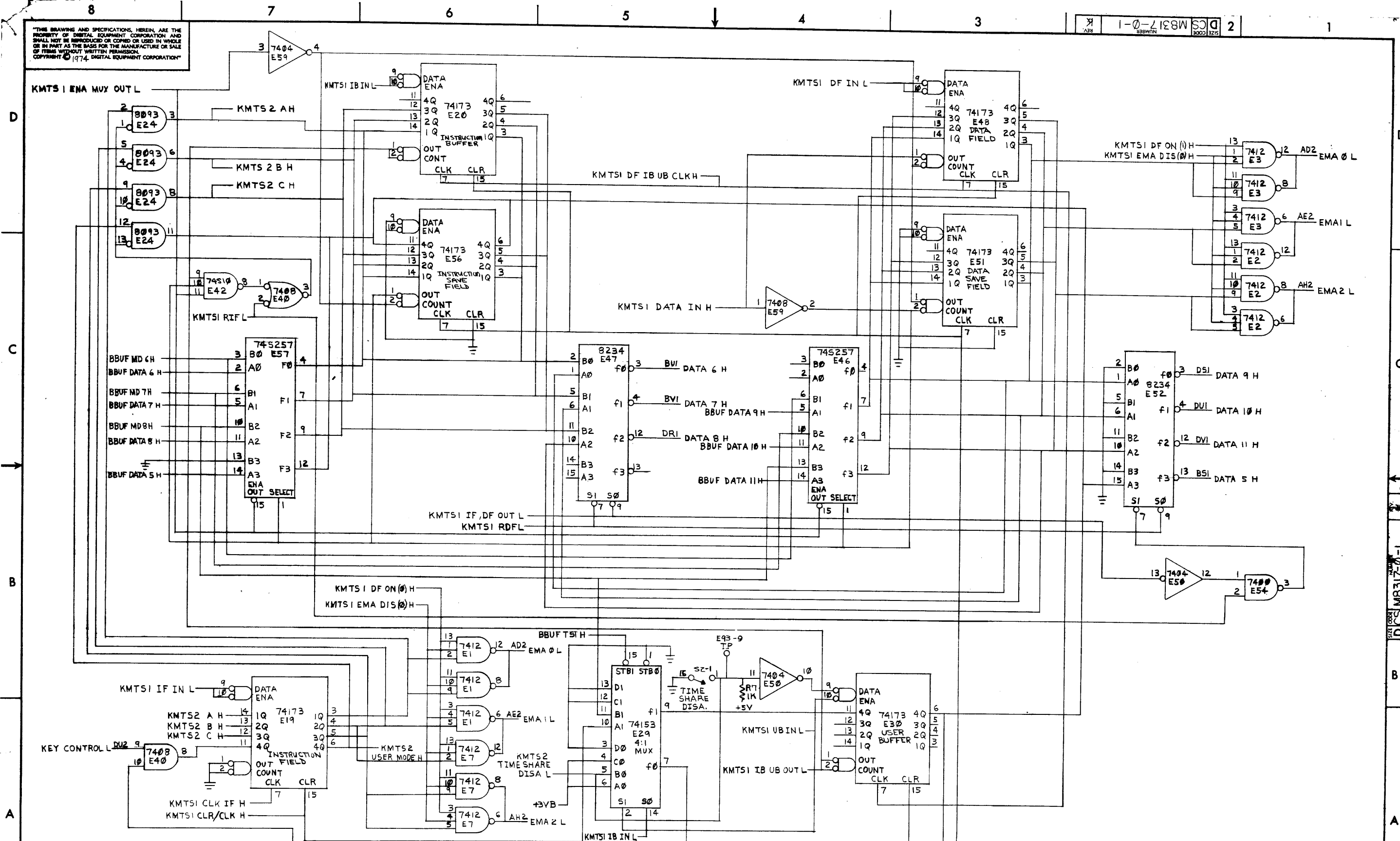
| QTY | REF. DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|-----|------------------|--------------------------|---------------------|-----------|
| | | TITLE OPTION BOARD #2 | NUMBER M8317-0-1 | REV. K |
| | | SCALE NONE | SHEET 2 OF 7 | DIST. |

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

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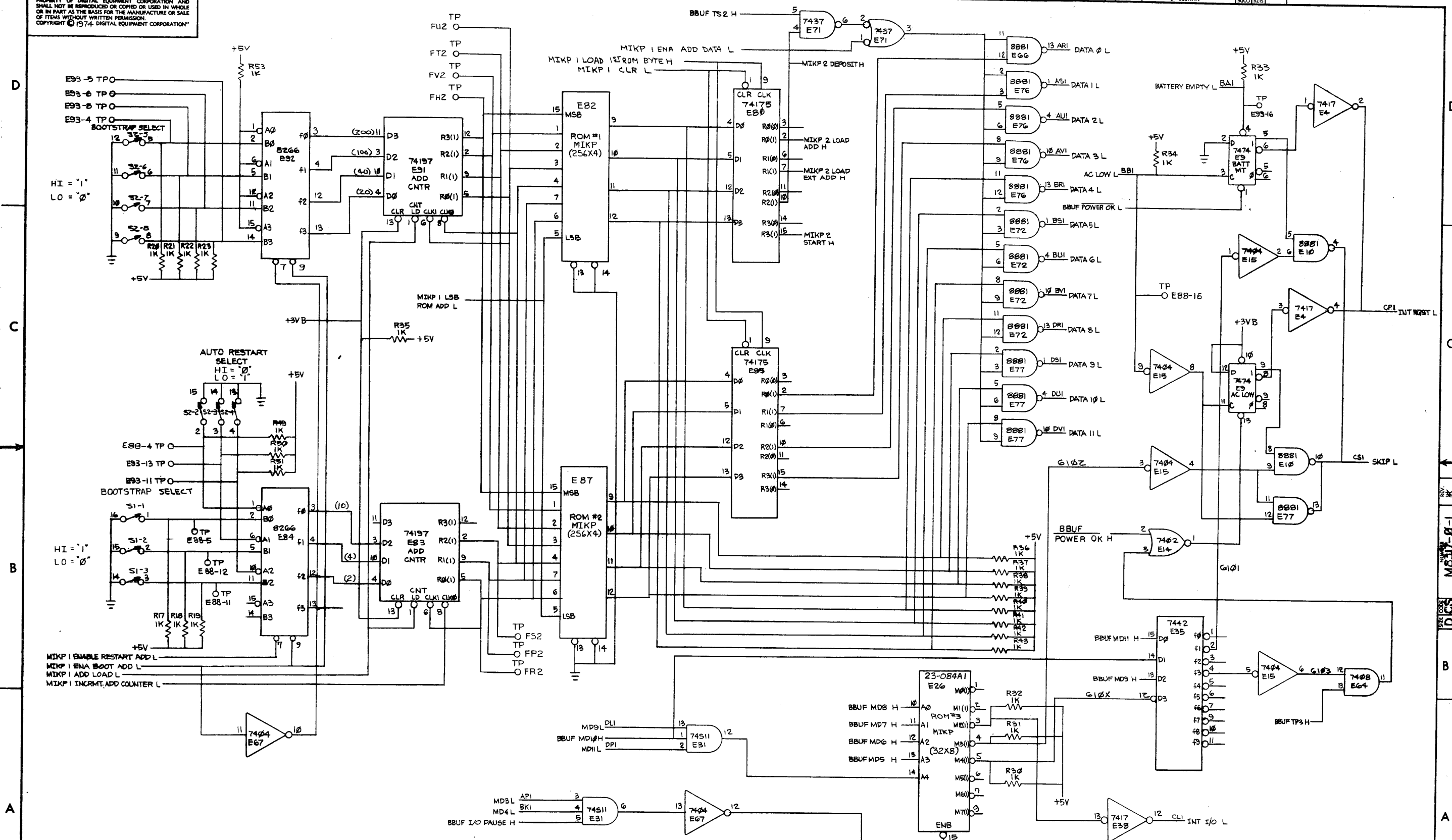
| REVISIONS | | |
|-----------|------------|------|
| CHK | CHANGE NO. | REV. |
| | | |

INSTRUCTION FIELD, DATA FIELD, IF & DF SAVE FIELD, INSTRUCTION BUFFER, USER BUFFER

| | | | | | | | |
|-------|-------------------------|-----------|------|--------|-----------|-------|---|
| TITLE | OPTION BOARD #2 (KMTS2) | SIZE CODE | D CS | NUMBER | M8317-0-1 | REV. | * |
| SCALE | NONE | SHEET | 4 | OF | 7 | DIST. | |

REV. 1-0-0 M8317-0-1 DCS

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

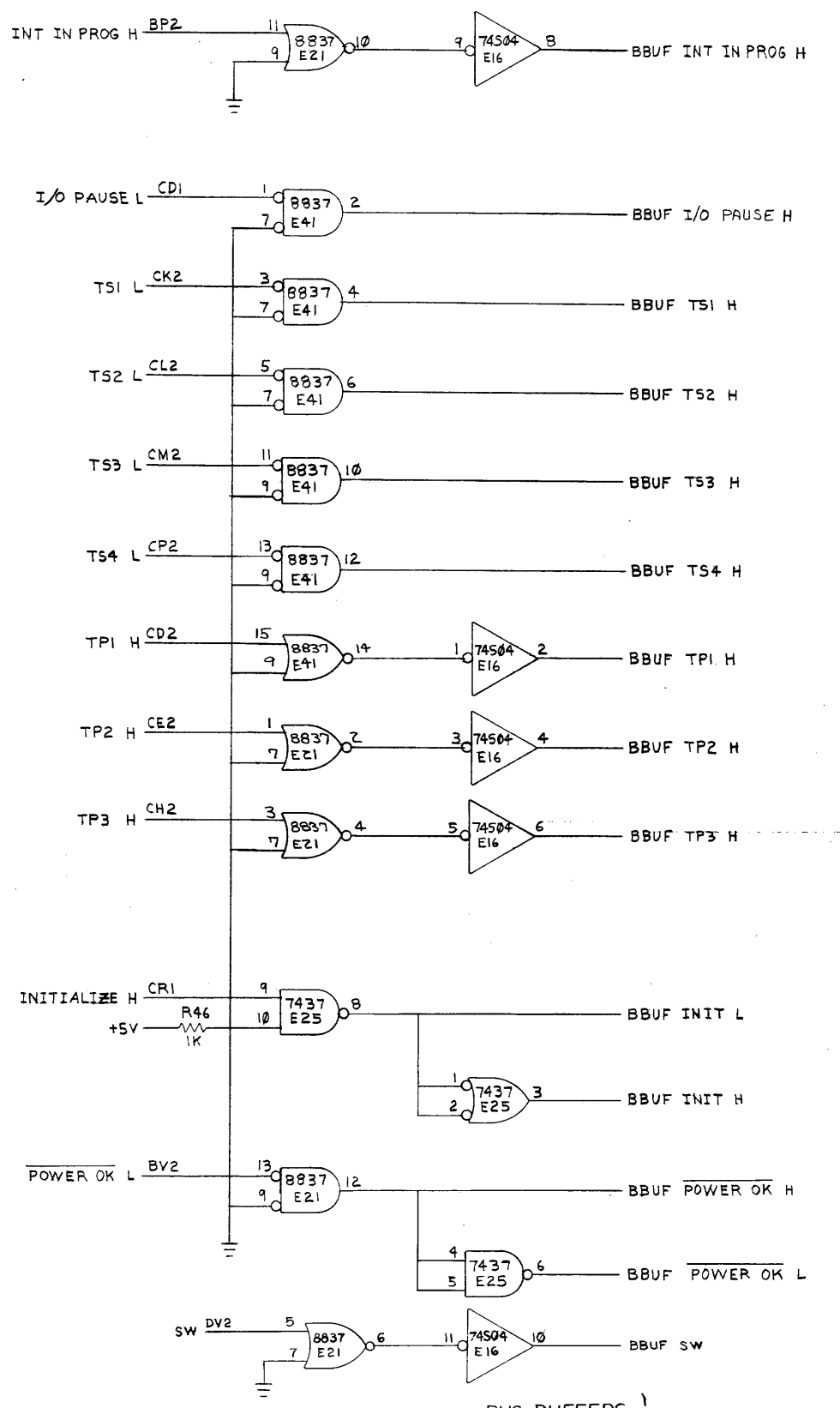
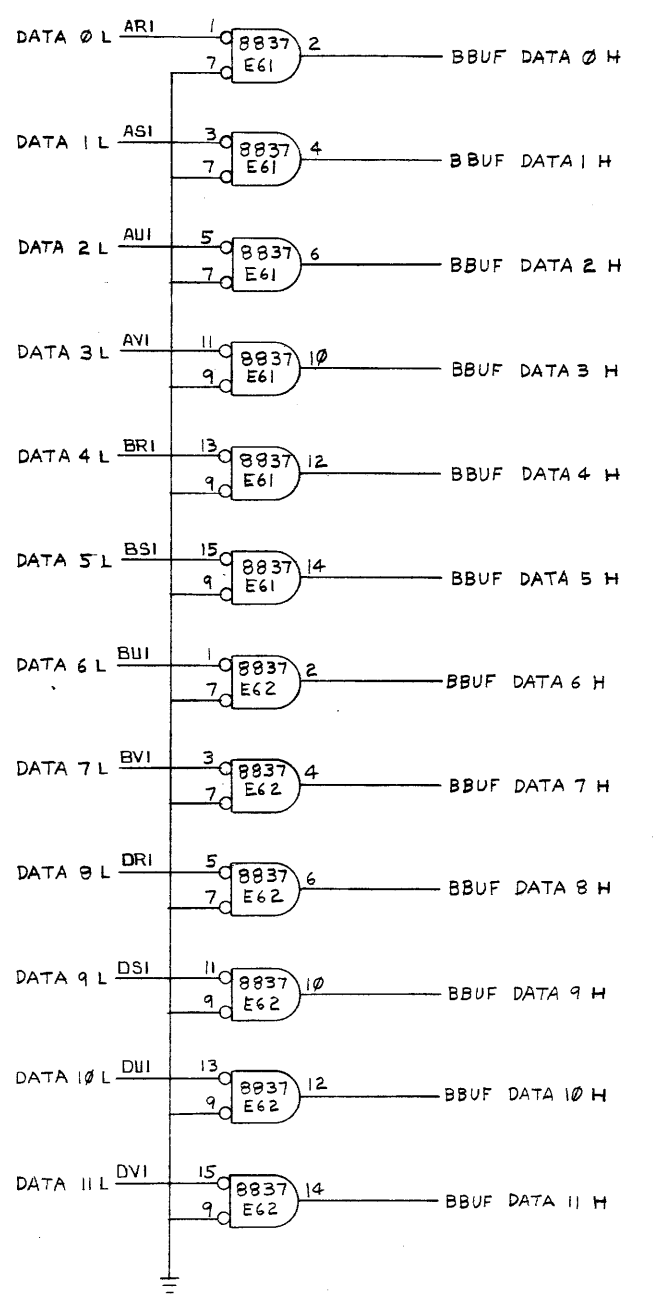
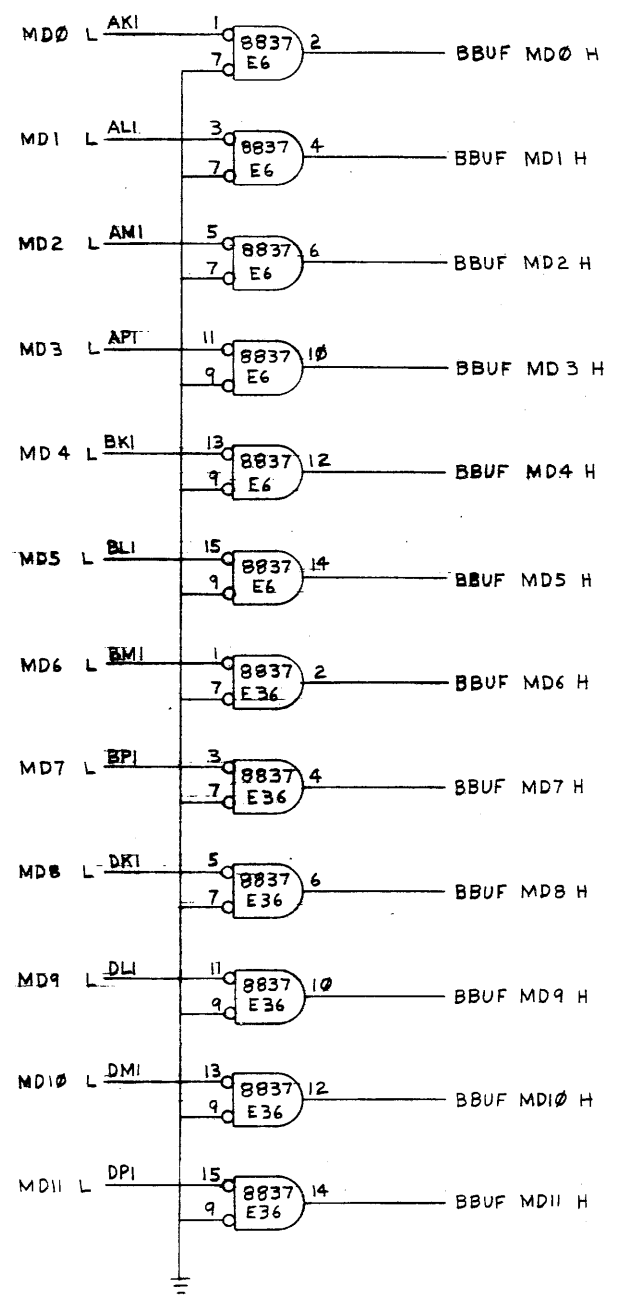
BOOTSTRAP/AUTO-RESTART ROMS AC LOW AND BATTERY EMPTY FLAGS

| | | | | | | | |
|-------|-----------------|-----------|------|--------|-----------|-------|---|
| TITLE | OPTION BOARD #2 | SIZE CODE | D CS | NUMBER | M8317-0-1 | REV. | K |
| SCALE | NONE | SHEET | 6 | OF | 7 | DIST. | |

REV. K M8317-0-1 DCS

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D
C
B
A




BUS BUFFERS

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

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| | | | | |
|------|-----------|---------------------|---|---|
| REV. | NUMBER | SIZE CODE | 2 | 1 |
| | 8 - 0 - 8 | K RL M 8317 - 0 - 8 | | |

| | | | | |
|------------------------------|---------------|---|----------|----------|
| FIRST USED ON OPTION MODEL | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
| PDP8-A | | | | |
| PARTS LIST | | | | |
| DRN. <i>Walt Olson</i> | DATE 7/24/74 | <div style="text-align: center;">  <p>digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS</p> </div> | | |
| CHK'D <i>Walt Olson</i> | DATE 7/24/74 | | | |
| ENG. <i>Larry Nash</i> | DATE 12/26/74 | | | |
| PROJ. ENG. <i>Larry Nash</i> | DATE 12/26/74 | | | |
| PROD. <i>Don DeRue</i> | DATE 12-26-74 | | | |
| NEXT HIGHER ASSEMBLY | | TITLE | | |
| B-DD-KM8-A | | | | |
| SCALE | | SIZE CODE | NUMBER | REV. |
| SHEET 1 OF 2 | | K RL M 8317 - 0 - 8 | | |
| | | DIST. | | |

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



DEC PART NUMB: 23-084A1
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 6-22-74


digital EQUIPMENT CORPORATION

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 0 | 00 | 11111111 | 377 |
| 1 | 01 | 11111111 | 377 |
| 2 | 02 | 11111111 | 377 |
| 3 | 03 | 11111111 | 377 |
| 4 | 04 | 11111111 | 377 |
| 5 | 05 | 11111111 | 377 |
| 6 | 06 | 11111111 | 377 |
| 7 | 07 | 11111111 | 377 |
| 8 | 10 | 11010111 | 327 |
| 9 | 11 | 11111111 | 377 |
| 10 | 12 | 11111111 | 377 |
| 11 | 13 | 11111111 | 377 |
| 12 | 14 | 11111111 | 377 |
| 13 | 15 | 11111111 | 377 |
| 14 | 16 | 11111111 | 377 |
| 15 | 17 | 11111111 | 377 |
| 16 | 20 | 11111111 | 377 |
| 17 | 21 | 11111111 | 377 |
| 18 | 22 | 11111111 | 377 |
| 19 | 23 | 11111111 | 377 |
| 20 | 24 | 11111111 | 377 |
| 21 | 25 | 11111111 | 377 |
| 22 | 26 | 11111111 | 377 |
| 23 | 27 | 11111111 | 377 |
| 24 | 30 | 11000111 | 307 |
| 25 | 31 | 11111111 | 377 |
| 26 | 32 | 11111111 | 377 |
| 27 | 33 | 11111111 | 377 |
| 28 | 34 | 11111111 | 377 |
| 29 | 35 | 11111111 | 377 |
| 30 | 36 | 11111111 | 377 |
| 31 | 37 | 11111111 | 377 |

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REV. NUMBER SIZE CODE KRL M8317-Ø-9 2 1

| FIRST USED ON OPTION MODEL | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
|--------------------------------|---------------|--|-----------|----------|
| PDP8 - A | | | | |
| PARTS LIST | | | | |
| DRN. <i>[Signature]</i> | DATE |  digital EQUIPMENT CORPORATION <small>MAYNARD, MASSACHUSETTS</small> | | |
| CHK'D. <i>[Signature]</i> | DATE | | | |
| ENG. <i>Larry Narkis</i> | DATE 12/20/74 | | | |
| PROJ. ENG. <i>Larry Narkis</i> | DATE 12/20/74 | | | |
| PROD. <i>[Signature]</i> | DATE 12-20-74 | | | |
| NEXT HIGHER ASSEMBLY | | TITLE ROM PATTERN SPEC. | | |
| 3-DD- KM8-A | | | | |
| SCALE | | SIZE CODE | NUMBER | REV. |
| | | KRL | M8317-Ø-9 | |
| SHEET 1 OF 9 | | DIST. | | |

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

K-RL-M8317-Ø-9

DEC PART NUMB: 23-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

ROM PATTERN SPEC

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 0 | 000 | 1111 | 17 |
| 1 | 001 | 1111 | 17 |
| 2 | 002 | 1111 | 17 |
| 3 | 003 | 1111 | 17 |
| 4 | 004 | 1111 | 17 |
| 5 | 005 | 1111 | 17 |
| 6 | 006 | 1111 | 17 |
| 7 | 007 | 1111 | 17 |
| 8 | 010 | 1111 | 17 |
| 9 | 011 | 1111 | 17 |
| 10 | 012 | 1111 | 17 |
| 11 | 013 | 1111 | 17 |
| 12 | 014 | 1111 | 17 |
| 13 | 015 | 1111 | 17 |
| 14 | 016 | 1111 | 17 |
| 15 | 017 | 1111 | 17 |
| 16 | 020 | 1111 | 17 |
| 17 | 021 | 1111 | 17 |
| 18 | 022 | 1111 | 17 |
| 19 | 023 | 1111 | 17 |
| 20 | 024 | 1111 | 17 |
| 21 | 025 | 1111 | 17 |
| 22 | 026 | 1111 | 17 |
| 23 | 027 | 1111 | 17 |
| 24 | 030 | 1111 | 17 |
| 25 | 031 | 1111 | 17 |
| 26 | 032 | 1111 | 17 |
| 27 | 033 | 1111 | 17 |
| 28 | 034 | 1111 | 17 |
| 29 | 035 | 1111 | 17 |
| 30 | 036 | 1111 | 17 |
| 31 | 037 | 1111 | 17 |
| 32 | 040 | 1111 | 17 |
| 33 | 041 | 1111 | 17 |
| 34 | 042 | 1111 | 17 |
| 35 | 043 | 1111 | 17 |

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K-RL-M8317-Ø-9

DEC PART NUMB: 23-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

ROM PATTERN SPEC

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 36 | 044 | 1111 | 17 |
| 37 | 045 | 1111 | 17 |
| 38 | 046 | 1111 | 17 |
| 39 | 047 | 1111 | 17 |
| 40 | 050 | 1111 | 17 |
| 41 | 051 | 1111 | 17 |
| 42 | 052 | 1111 | 17 |
| 43 | 053 | 1111 | 17 |
| 44 | 054 | 1111 | 17 |
| 45 | 055 | 1111 | 17 |
| 46 | 056 | 1111 | 17 |
| 47 | 057 | 1111 | 17 |
| 48 | 060 | 1111 | 17 |
| 49 | 061 | 1111 | 17 |
| 50 | 062 | 1111 | 17 |
| 51 | 063 | 1111 | 17 |
| 52 | 064 | 1111 | 17 |
| 53 | 065 | 1111 | 17 |
| 54 | 066 | 1111 | 17 |
| 55 | 067 | 1111 | 17 |
| 56 | 070 | 1111 | 17 |
| 57 | 071 | 1111 | 17 |
| 58 | 072 | 1111 | 17 |
| 59 | 073 | 1111 | 17 |
| 60 | 074 | 1111 | 17 |
| 61 | 075 | 1111 | 17 |
| 62 | 076 | 1111 | 17 |
| 63 | 077 | 1111 | 17 |
| 64 | 100 | 1111 | 17 |
| 65 | 101 | 1111 | 17 |
| 66 | 102 | 1111 | 17 |
| 67 | 103 | 1111 | 17 |
| 68 | 104 | 1111 | 17 |
| 69 | 105 | 1111 | 17 |
| 70 | 106 | 0011 | 03 |
| 71 | 107 | 1111 | 17 |

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DIGITAL EQUIPMENT CORPORATION

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ROM PATTERN SPEC

PAGE 4 OF 9

DEC PART NUMB: 21-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 72 | 110 | 1111 | 17 |
| 73 | 111 | 1111 | 17 |
| 74 | 112 | 0101 | 05 |
| 75 | 113 | 1111 | 17 |
| 76 | 114 | 1111 | 17 |
| 77 | 115 | 1111 | 17 |
| 78 | 116 | 0001 | 01 |
| 79 | 117 | 1111 | 17 |
| 80 | 120 | 1111 | 17 |
| 81 | 121 | 1111 | 17 |
| 82 | 122 | 0110 | 06 |
| 83 | 123 | 1111 | 17 |
| 84 | 124 | 1111 | 17 |
| 85 | 125 | 1111 | 17 |
| 86 | 126 | 1111 | 17 |
| 87 | 127 | 1111 | 17 |
| 88 | 130 | 1111 | 17 |
| 89 | 131 | 1111 | 17 |
| 90 | 132 | 1111 | 17 |
| 91 | 133 | 1111 | 17 |
| 92 | 134 | 1111 | 17 |
| 93 | 135 | 1111 | 17 |
| 94 | 136 | 1111 | 17 |
| 95 | 137 | 1111 | 17 |
| 96 | 140 | 1111 | 17 |
| 97 | 141 | 1111 | 17 |
| 98 | 142 | 1111 | 17 |
| 99 | 143 | 1111 | 17 |
| 100 | 144 | 1111 | 17 |
| 101 | 145 | 1111 | 17 |
| 102 | 146 | 1111 | 17 |
| 103 | 147 | 1111 | 17 |
| 104 | 150 | 1111 | 17 |
| 105 | 151 | 1111 | 17 |
| 106 | 152 | 1111 | 17 |
| 107 | 153 | 1111 | 17 |

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ROM PATTERN SPEC

PAGE 5 OF 9

DEC PART NUMB: 21-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 108 | 154 | 1111 | 17 |
| 109 | 155 | 1111 | 17 |
| 110 | 156 | 1111 | 17 |
| 111 | 157 | 1111 | 17 |
| 112 | 160 | 1111 | 17 |
| 113 | 161 | 1111 | 17 |
| 114 | 162 | 1111 | 17 |
| 115 | 163 | 1111 | 17 |
| 116 | 164 | 1111 | 17 |
| 117 | 165 | 1111 | 17 |
| 118 | 166 | 1111 | 17 |
| 119 | 167 | 1111 | 17 |
| 120 | 170 | 1111 | 17 |
| 121 | 171 | 1111 | 17 |
| 122 | 172 | 1111 | 17 |
| 123 | 173 | 1111 | 17 |
| 124 | 174 | 1111 | 17 |
| 125 | 175 | 1111 | 17 |
| 126 | 176 | 1111 | 17 |
| 127 | 177 | 1111 | 17 |
| 128 | 200 | 1111 | 17 |
| 129 | 201 | 1111 | 17 |
| 130 | 202 | 1111 | 17 |
| 131 | 203 | 1111 | 17 |
| 132 | 204 | 1111 | 17 |
| 133 | 205 | 1111 | 17 |
| 134 | 206 | 1111 | 17 |
| 135 | 207 | 1111 | 17 |
| 136 | 210 | 1111 | 17 |
| 137 | 211 | 1111 | 17 |
| 138 | 212 | 1111 | 17 |
| 139 | 213 | 1111 | 17 |
| 140 | 214 | 1111 | 17 |
| 141 | 215 | 1111 | 17 |
| 142 | 216 | 1111 | 17 |
| 143 | 217 | 1111 | 17 |

Digital EQUIPMENT CORPORATION

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ROM PATTERN SPEC

PAGE 6 OF 9

DEC PART NUMB: 21-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 144 | 220 | 1111 | 17 |
| 145 | 221 | 1111 | 17 |
| 146 | 222 | 1111 | 17 |
| 147 | 223 | 1111 | 17 |
| 148 | 224 | 1111 | 17 |
| 149 | 225 | 1111 | 17 |
| 150 | 226 | 1111 | 17 |
| 151 | 227 | 1111 | 17 |
| 152 | 230 | 1111 | 17 |
| 153 | 231 | 1111 | 17 |
| 154 | 232 | 1111 | 17 |
| 155 | 233 | 1111 | 17 |
| 156 | 234 | 1111 | 17 |
| 157 | 235 | 1111 | 17 |
| 158 | 236 | 1111 | 17 |
| 159 | 237 | 1111 | 17 |
| 160 | 240 | 1111 | 17 |
| 161 | 241 | 1111 | 17 |
| 162 | 242 | 1111 | 17 |
| 163 | 243 | 1111 | 17 |
| 164 | 244 | 1111 | 17 |
| 165 | 245 | 1111 | 17 |
| 166 | 246 | 1111 | 17 |
| 167 | 247 | 1111 | 17 |
| 168 | 250 | 1111 | 17 |
| 169 | 251 | 1111 | 17 |
| 170 | 252 | 1111 | 17 |
| 171 | 253 | 1111 | 17 |
| 172 | 254 | 1111 | 17 |
| 173 | 255 | 1111 | 17 |
| 174 | 256 | 1111 | 17 |
| 175 | 257 | 1111 | 17 |
| 176 | 260 | 1111 | 17 |
| 177 | 261 | 1111 | 17 |
| 178 | 262 | 1111 | 17 |
| 179 | 263 | 1111 | 17 |

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ROM PATTERN SPEC

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DEC PART NUMB: 21-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 180 | 264 | 1111 | 17 |
| 181 | 265 | 1111 | 17 |
| 182 | 266 | 1111 | 17 |
| 183 | 267 | 1111 | 17 |
| 184 | 270 | 1111 | 17 |
| 185 | 271 | 1111 | 17 |
| 186 | 272 | 1111 | 17 |
| 187 | 273 | 1111 | 17 |
| 188 | 274 | 1111 | 17 |
| 189 | 275 | 1111 | 17 |
| 190 | 276 | 1111 | 17 |
| 191 | 277 | 1111 | 17 |
| 192 | 300 | 1111 | 17 |
| 193 | 301 | 1111 | 17 |
| 194 | 302 | 1111 | 17 |
| 195 | 303 | 1111 | 17 |
| 196 | 304 | 1111 | 17 |
| 197 | 305 | 1111 | 17 |
| 198 | 306 | 1111 | 17 |
| 199 | 307 | 1111 | 17 |
| 200 | 310 | 1111 | 17 |
| 201 | 311 | 1111 | 17 |
| 202 | 312 | 1111 | 17 |
| 203 | 313 | 1111 | 17 |
| 204 | 314 | 1111 | 17 |
| 205 | 315 | 1111 | 17 |
| 206 | 316 | 1111 | 17 |
| 207 | 317 | 1111 | 17 |
| 208 | 320 | 1111 | 17 |
| 209 | 321 | 1111 | 17 |
| 210 | 322 | 1111 | 17 |
| 211 | 323 | 1111 | 17 |
| 212 | 324 | 1111 | 17 |
| 213 | 325 | 1111 | 17 |
| 214 | 326 | 1111 | 17 |
| 215 | 327 | 1111 | 17 |

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ROM PATTERN SPEC

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DEC PART NUMB: 23-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 216 | 330 | 1111 | 17 |
| 217 | 331 | 1111 | 17 |
| 218 | 332 | 1111 | 17 |
| 219 | 333 | 1111 | 17 |
| 220 | 334 | 1111 | 17 |
| 221 | 335 | 1111 | 17 |
| 222 | 336 | 1111 | 17 |
| 223 | 337 | 1111 | 17 |
| 224 | 340 | 1111 | 17 |
| 225 | 341 | 1111 | 17 |
| 226 | 342 | 1111 | 17 |
| 227 | 343 | 1111 | 17 |
| 228 | 344 | 1111 | 17 |
| 229 | 345 | 1111 | 17 |
| 230 | 346 | 1111 | 17 |
| 231 | 347 | 1111 | 17 |
| 232 | 350 | 1111 | 17 |
| 233 | 351 | 1111 | 17 |
| 234 | 352 | 1111 | 17 |
| 235 | 353 | 1111 | 17 |
| 236 | 354 | 1111 | 17 |
| 237 | 355 | 1111 | 17 |
| 238 | 356 | 1111 | 17 |
| 239 | 357 | 1111 | 17 |
| 240 | 360 | 1111 | 17 |
| 241 | 361 | 1111 | 17 |
| 242 | 362 | 1111 | 17 |
| 243 | 363 | 1111 | 17 |
| 244 | 364 | 1111 | 17 |
| 245 | 365 | 1111 | 17 |
| 246 | 366 | 1111 | 17 |
| 247 | 367 | 1111 | 17 |
| 248 | 370 | 1111 | 17 |
| 249 | 371 | 1111 | 17 |
| 250 | 372 | 1111 | 17 |
| 251 | 373 | 1111 | 17 |

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ROM PATTERN SPEC

PAGE 9 OF 9

DEC PART NUMB: 23-086A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-12-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 252 | 374 | 1111 | 17 |
| 253 | 375 | 1111 | 17 |
| 254 | 376 | 1111 | 17 |
| 255 | 377 | 1111 | 17 |

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REV. NUMBER SIZE CODE K RL M8317-0-10 2

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

| | | | | |
|-------------------------------|---------------|--|-------------------|----------|
| FIRST USED ON OPTION MODEL | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
| PDP8 - A | | | | |
| PARTS LIST | | | | |
| DRN. <i>S. Roberts</i> | DATE 12-20-74 |  digital EQUIPMENT CORPORATION <small>MAYNARD, MASSACHUSETTS</small> | | |
| CHK'D. <i>S. Roberts</i> | DATE 12-20-74 | | | |
| ENG. <i>Larry Nashi</i> | DATE 12/26/74 | | | |
| PROJ. ENG. <i>Larry Nashi</i> | DATE 12/26/74 | | | |
| PROB. <i>[Signature]</i> | DATE 12-20-74 | | | |
| NEXT HIGHER ASSEMBLY | | TITLE ROM PATTERN SPEC | | |
| B-DD-KM8-A | | | | |
| SCALE | | | | |
| SHEET 1 OF 9 | | SIZE CODE K RL | NUMBER M8317-0-10 | REV. |
| DIST. | | | | |

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ROM PATTERN SPEC

PAGE 2 OF 9

DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 0 | 000 | 1000 | 10 |
| 1 | 001 | 0000 | 00 |
| 2 | 002 | 0101 | 05 |
| 3 | 003 | 0000 | 00 |
| 4 | 004 | 1000 | 10 |
| 5 | 005 | 1000 | 10 |
| 6 | 006 | 0101 | 05 |
| 7 | 007 | 0000 | 00 |
| 8 | 010 | 1000 | 10 |
| 9 | 011 | 0000 | 00 |
| 10 | 012 | 0101 | 05 |
| 11 | 013 | 0000 | 00 |
| 12 | 014 | 1000 | 10 |
| 13 | 015 | 1000 | 10 |
| 14 | 016 | 0101 | 05 |
| 15 | 017 | 0000 | 00 |
| 16 | 020 | 1000 | 10 |
| 17 | 021 | 1101 | 15 |
| 18 | 022 | 0100 | 04 |
| 19 | 023 | 0000 | 00 |
| 20 | 024 | 0010 | 02 |
| 21 | 025 | 0000 | 00 |
| 22 | 026 | 0010 | 02 |
| 23 | 027 | 1111 | 17 |
| 24 | 030 | 0010 | 02 |
| 25 | 031 | 1101 | 15 |
| 26 | 032 | 0010 | 02 |
| 27 | 033 | 1101 | 15 |
| 28 | 034 | 0010 | 02 |
| 29 | 035 | 1111 | 17 |
| 30 | 036 | 0010 | 02 |
| 31 | 037 | 1110 | 16 |
| 32 | 040 | 0010 | 02 |
| 33 | 041 | 0000 | 00 |
| 34 | 042 | 0010 | 02 |
| 35 | 043 | 1110 | 16 |

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ROM PATTERN SPEC

PAGE 3 OF 9

DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 36 | 044 | 0010 | 02 |
| 37 | 045 | 1111 | 17 |
| 38 | 046 | 0010 | 02 |
| 39 | 047 | 1111 | 17 |
| 40 | 050 | 0010 | 02 |
| 41 | 051 | 1111 | 17 |
| 42 | 052 | 0010 | 02 |
| 43 | 053 | 1110 | 16 |
| 44 | 054 | 0010 | 02 |
| 45 | 055 | 1110 | 16 |
| 46 | 056 | 0010 | 02 |
| 47 | 057 | 1110 | 16 |
| 48 | 060 | 0010 | 02 |
| 49 | 061 | 1111 | 17 |
| 50 | 062 | 0010 | 02 |
| 51 | 063 | 0001 | 01 |
| 52 | 064 | 0010 | 02 |
| 53 | 065 | 0001 | 01 |
| 54 | 066 | 0010 | 02 |
| 55 | 067 | 1110 | 16 |
| 56 | 070 | 0010 | 02 |
| 57 | 071 | 0001 | 01 |
| 58 | 072 | 0010 | 02 |
| 59 | 073 | 0100 | 04 |
| 60 | 074 | 0010 | 02 |
| 61 | 075 | 0000 | 00 |
| 62 | 076 | 0010 | 02 |
| 63 | 077 | 0100 | 04 |
| 64 | 100 | 0010 | 02 |
| 65 | 101 | 1111 | 17 |
| 66 | 102 | 0010 | 02 |
| 67 | 103 | 0000 | 00 |
| 68 | 104 | 0010 | 02 |
| 69 | 105 | 0001 | 01 |
| 70 | 106 | 0010 | 02 |
| 71 | 107 | 1111 | 17 |

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ROM PATTERN SPEC

PAGE 4 OF 9

DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 72 | 110 | 0010 | 02 |
| 73 | 111 | 0001 | 01 |
| 74 | 112 | 0010 | 02 |
| 75 | 113 | 0001 | 01 |
| 76 | 114 | 0010 | 02 |
| 77 | 115 | 1111 | 17 |
| 78 | 116 | 0010 | 02 |
| 79 | 117 | 1111 | 17 |
| 80 | 120 | 0010 | 02 |
| 81 | 121 | 1110 | 16 |
| 82 | 122 | 1001 | 11 |
| 83 | 123 | 1101 | 15 |
| 84 | 124 | 1000 | 10 |
| 85 | 125 | 0001 | 01 |
| 86 | 126 | 0100 | 04 |
| 87 | 127 | 0000 | 00 |
| 88 | 130 | 0010 | 02 |
| 89 | 131 | 0000 | 00 |
| 90 | 132 | 0010 | 02 |
| 91 | 133 | 1110 | 16 |
| 92 | 134 | 0010 | 02 |
| 93 | 135 | 0001 | 01 |
| 94 | 136 | 0010 | 02 |
| 95 | 137 | 1010 | 12 |
| 96 | 140 | 0010 | 02 |
| 97 | 141 | 0001 | 01 |
| 98 | 142 | 0010 | 02 |
| 99 | 143 | 1110 | 16 |
| 100 | 144 | 0010 | 02 |
| 101 | 145 | 0001 | 01 |
| 102 | 146 | 1001 | 11 |
| 103 | 147 | 0001 | 01 |
| 104 | 150 | 1000 | 10 |
| 105 | 151 | 1000 | 10 |
| 106 | 152 | 0100 | 04 |
| 107 | 153 | 0000 | 00 |

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ROM PATTERN SPEC

PAGE 5 OF 9

DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 108 | 154 | 0010 | 02 |
| 109 | 155 | 1111 | 17 |
| 110 | 156 | 0010 | 02 |
| 111 | 157 | 1001 | 11 |
| 112 | 160 | 0010 | 02 |
| 113 | 161 | 1111 | 17 |
| 114 | 162 | 0010 | 02 |
| 115 | 163 | 1111 | 17 |
| 116 | 164 | 0010 | 02 |
| 117 | 165 | 1000 | 10 |
| 118 | 166 | 0010 | 02 |
| 119 | 167 | 1001 | 11 |
| 120 | 170 | 0010 | 02 |
| 121 | 171 | 1000 | 10 |
| 122 | 172 | 0010 | 02 |
| 123 | 173 | 1000 | 10 |
| 124 | 174 | 0010 | 02 |
| 125 | 175 | 1001 | 11 |
| 126 | 176 | 1000 | 10 |
| 127 | 177 | 1110 | 16 |
| 128 | 200 | 0010 | 02 |
| 129 | 201 | 0111 | 07 |
| 130 | 202 | 0010 | 02 |
| 131 | 203 | 0111 | 07 |
| 132 | 204 | 1001 | 11 |
| 133 | 205 | 1000 | 10 |
| 134 | 206 | 1000 | 10 |
| 135 | 207 | 1110 | 16 |
| 136 | 210 | 0100 | 04 |
| 137 | 211 | 0000 | 00 |
| 138 | 212 | 0010 | 02 |
| 139 | 213 | 1000 | 10 |
| 140 | 214 | 0010 | 02 |
| 141 | 215 | 1000 | 10 |
| 142 | 216 | 0010 | 02 |
| 143 | 217 | 1001 | 11 |

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ROM PATTERN SPEC

PAGE 6 OF 9

DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 144 | 220 | 0010 | 02 |
| 145 | 221 | 1110 | 16 |
| 146 | 222 | 0010 | 02 |
| 147 | 223 | 1110 | 16 |
| 148 | 224 | 1001 | 11 |
| 149 | 225 | 1110 | 16 |
| 150 | 226 | 1000 | 10 |
| 151 | 227 | 0000 | 00 |
| 152 | 230 | 0100 | 04 |
| 153 | 231 | 0000 | 00 |
| 154 | 232 | 0010 | 02 |
| 155 | 233 | 1001 | 11 |
| 156 | 234 | 0010 | 02 |
| 157 | 235 | 1000 | 10 |
| 158 | 236 | 0010 | 02 |
| 159 | 237 | 1100 | 14 |
| 160 | 240 | 0010 | 02 |
| 161 | 241 | 1100 | 14 |
| 162 | 242 | 0010 | 02 |
| 163 | 243 | 1100 | 14 |
| 164 | 244 | 0010 | 02 |
| 165 | 245 | 1000 | 10 |
| 166 | 246 | 0010 | 02 |
| 167 | 247 | 1011 | 13 |
| 168 | 250 | 0010 | 02 |
| 169 | 251 | 1100 | 14 |
| 170 | 252 | 0010 | 02 |
| 171 | 253 | 1000 | 10 |
| 172 | 254 | 0010 | 02 |
| 173 | 255 | 1000 | 10 |
| 174 | 256 | 0010 | 02 |
| 175 | 257 | 1001 | 11 |
| 176 | 260 | 0010 | 02 |
| 177 | 261 | 1000 | 10 |
| 178 | 262 | 0010 | 02 |
| 179 | 263 | 1100 | 14 |

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ROM PATTERN SPEC

PAGE 7 OF 9

DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 180 | 264 | 0010 | 02 |
| 181 | 265 | 1100 | 14 |
| 182 | 266 | 0010 | 02 |
| 183 | 267 | 1100 | 14 |
| 184 | 270 | 0010 | 02 |
| 185 | 271 | 1000 | 10 |
| 186 | 272 | 0010 | 02 |
| 187 | 273 | 0000 | 00 |
| 188 | 274 | 0010 | 02 |
| 189 | 275 | 0001 | 01 |
| 190 | 276 | 0010 | 02 |
| 191 | 277 | 1001 | 11 |
| 192 | 300 | 0010 | 02 |
| 193 | 301 | 0001 | 01 |
| 194 | 302 | 0010 | 02 |
| 195 | 303 | 1001 | 11 |
| 196 | 304 | 0010 | 02 |
| 197 | 305 | 0001 | 01 |
| 198 | 306 | 0010 | 02 |
| 199 | 307 | 1001 | 11 |
| 200 | 310 | 0010 | 02 |
| 201 | 311 | 1001 | 11 |
| 202 | 312 | 0010 | 02 |
| 203 | 313 | 1000 | 10 |
| 204 | 314 | 0010 | 02 |
| 205 | 315 | 1110 | 16 |
| 206 | 316 | 0010 | 02 |
| 207 | 317 | 0000 | 00 |
| 208 | 320 | 0010 | 02 |
| 209 | 321 | 1001 | 11 |
| 210 | 322 | 0010 | 02 |
| 211 | 323 | 1000 | 10 |
| 212 | 324 | 0010 | 02 |
| 213 | 325 | 1101 | 15 |
| 214 | 326 | 0010 | 02 |
| 215 | 327 | 0110 | 06 |

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ROM PATTERN SPEC

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DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 216 | 330 | 0010 | 02 |
| 217 | 331 | 1101 | 15 |
| 218 | 332 | 1001 | 11 |
| 219 | 333 | 0000 | 00 |
| 220 | 334 | 0000 | 00 |
| 221 | 335 | 0000 | 00 |
| 222 | 336 | 0000 | 00 |
| 223 | 337 | 0000 | 00 |
| 224 | 340 | 0000 | 00 |
| 225 | 341 | 0000 | 00 |
| 226 | 342 | 0000 | 00 |
| 227 | 343 | 0000 | 00 |
| 228 | 344 | 0000 | 00 |
| 229 | 345 | 0000 | 00 |
| 230 | 346 | 0000 | 00 |
| 231 | 347 | 0000 | 00 |
| 232 | 350 | 0000 | 00 |
| 233 | 351 | 0000 | 00 |
| 234 | 352 | 0000 | 00 |
| 235 | 353 | 0000 | 00 |
| 236 | 354 | 0000 | 00 |
| 237 | 355 | 0000 | 00 |
| 238 | 356 | 0000 | 00 |
| 239 | 357 | 0000 | 00 |
| 240 | 360 | 0000 | 00 |
| 241 | 361 | 0000 | 00 |
| 242 | 362 | 0000 | 00 |
| 243 | 363 | 0000 | 00 |
| 244 | 364 | 0000 | 00 |
| 245 | 365 | 0000 | 00 |
| 246 | 366 | 0000 | 00 |
| 247 | 367 | 0000 | 00 |
| 248 | 370 | 0000 | 00 |
| 249 | 371 | 0000 | 00 |
| 250 | 372 | 0000 | 00 |
| 251 | 373 | 0000 | 00 |

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ROM PATTERN SPEC

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DEC PART NUMB: 23-087A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 252 | 374 | 0000 | 00 |
| 253 | 375 | 0000 | 00 |
| 254 | 376 | 0000 | 00 |
| 255 | 377 | 0000 | 00 |


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REV. NUMBER SIZE CODE PART NO. 2 1



| FIRST USED ON OPTION MODEL | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
|----------------------------|--------|--|----------|----------|
| PDP8-A | | | | |
| PARTS LIST | | | | |
| DRN. | DATE |  digital EQUIPMENT CORPORATION <small>MAYNARD, MASSACHUSETTS</small> | | |
| CHK'D. | DATE | | | |
| ENG. | DATE | | | |
| PROJ. ENG. | DATE | | | |
| PROD. | DATE | | | |
| NEXT HIGHER ASSEMBLY | | TITLE ROM PATTERN SPEC | | |
| B-DD-KM8-A | | | | |
| SCALE | | | | |
| SHEET | 1 OF 9 | SIZE CODE | NUMBER | REV. |
| | | K RL M8317-Ø-11 | | |
| | | DIST. | | |

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

DEC PART NUMB: 23-088A2
 ORIGINATOR: LARRY NARHI
 DATE OF ORIGIN: 7-16-74

ROM PATTERN SPEC

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 0 | 000 | 0000 | 00 |
| 1 | 001 | 0000 | 00 |
| 2 | 002 | 0000 | 00 |
| 3 | 003 | 0000 | 00 |
| 4 | 004 | 0000 | 00 |
| 5 | 005 | 0000 | 00 |
| 6 | 006 | 0000 | 00 |
| 7 | 007 | 0000 | 00 |
| 8 | 010 | 0100 | 04 |
| 9 | 011 | 0000 | 00 |
| 10 | 012 | 0000 | 00 |
| 11 | 013 | 0000 | 00 |
| 12 | 014 | 1000 | 10 |
| 13 | 015 | 0000 | 00 |
| 14 | 016 | 0000 | 00 |
| 15 | 017 | 0000 | 00 |
| 16 | 020 | 1111 | 17 |
| 17 | 021 | 1111 | 17 |
| 18 | 022 | 0000 | 00 |
| 19 | 023 | 0000 | 00 |
| 20 | 024 | 1100 | 14 |
| 21 | 025 | 1100 | 14 |
| 22 | 026 | 0001 | 01 |
| 23 | 027 | 1110 | 16 |
| 24 | 030 | 1110 | 16 |
| 25 | 031 | 0110 | 06 |
| 26 | 032 | 0010 | 02 |
| 27 | 033 | 1111 | 17 |
| 28 | 034 | 0100 | 04 |
| 29 | 035 | 1110 | 16 |
| 30 | 036 | 1010 | 12 |
| 31 | 037 | 0000 | 00 |
| 32 | 040 | 1100 | 14 |
| 33 | 041 | 1001 | 11 |
| 34 | 042 | 1010 | 12 |
| 35 | 043 | 1110 | 16 |

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28820

DEC PART NUMB: 23-088A2
 ORIGINATOR: LARRY NARHI
 DATE OF ORIGIN: 7-16-74

ROM PATTERN SPEC

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 36 | 044 | 0110 | 06 |
| 37 | 045 | 0001 | 01 |
| 38 | 046 | 0010 | 02 |
| 39 | 047 | 0001 | 01 |
| 40 | 050 | 0110 | 06 |
| 41 | 051 | 1001 | 11 |
| 42 | 052 | 0010 | 02 |
| 43 | 053 | 0101 | 05 |
| 44 | 054 | 0110 | 06 |
| 45 | 055 | 1111 | 17 |
| 46 | 056 | 0010 | 02 |
| 47 | 057 | 0101 | 05 |
| 48 | 060 | 0110 | 06 |
| 49 | 061 | 0111 | 07 |
| 50 | 062 | 1100 | 14 |
| 51 | 063 | 1010 | 12 |
| 52 | 064 | 1100 | 14 |
| 53 | 065 | 1001 | 11 |
| 54 | 066 | 1010 | 12 |
| 55 | 067 | 1111 | 17 |
| 56 | 070 | 1100 | 14 |
| 57 | 071 | 1110 | 16 |
| 58 | 072 | 1110 | 16 |
| 59 | 073 | 0110 | 06 |
| 60 | 074 | 1110 | 16 |
| 61 | 075 | 0110 | 06 |
| 62 | 076 | 1111 | 17 |
| 63 | 077 | 1000 | 10 |
| 64 | 100 | 1010 | 12 |
| 65 | 101 | 1100 | 14 |
| 66 | 102 | 1110 | 16 |
| 67 | 103 | 0110 | 06 |
| 68 | 104 | 1100 | 14 |
| 69 | 105 | 1001 | 11 |
| 70 | 106 | 1010 | 12 |
| 71 | 107 | 0111 | 07 |

DIGITAL EQUIPMENT CORPORATION

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ROM PATTERN SPEC

PAGE 4 OF 9

DPC PART NUMB: 21-088A2
ORIGINATOR: LARRY MARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 72 | 110 | 1100 | 14 |
| 73 | 111 | 1100 | 14 |
| 74 | 112 | 1111 | 17 |
| 75 | 113 | 0000 | 00 |
| 76 | 114 | 0111 | 07 |
| 77 | 115 | 1110 | 16 |
| 78 | 116 | 0110 | 06 |
| 79 | 117 | 1110 | 16 |
| 80 | 120 | 1010 | 12 |
| 81 | 121 | 1110 | 16 |
| 82 | 122 | 1111 | 17 |
| 83 | 123 | 1111 | 17 |
| 84 | 124 | 0000 | 00 |
| 85 | 125 | 0011 | 03 |
| 86 | 126 | 0000 | 00 |
| 87 | 127 | 0000 | 00 |
| 88 | 130 | 0100 | 04 |
| 89 | 131 | 0000 | 00 |
| 90 | 132 | 1101 | 15 |
| 91 | 133 | 0101 | 05 |
| 92 | 134 | 0000 | 00 |
| 93 | 135 | 0011 | 03 |
| 94 | 136 | 1111 | 17 |
| 95 | 137 | 1000 | 10 |
| 96 | 140 | 1010 | 12 |
| 97 | 141 | 0100 | 04 |
| 98 | 142 | 1101 | 15 |
| 99 | 143 | 0011 | 03 |
| 100 | 144 | 1010 | 12 |
| 101 | 145 | 1001 | 11 |
| 102 | 146 | 0000 | 00 |
| 103 | 147 | 0100 | 04 |
| 104 | 150 | 1111 | 17 |
| 105 | 151 | 1011 | 13 |
| 106 | 152 | 0000 | 00 |
| 107 | 153 | 0000 | 00 |

DIGITAL EQUIPMENT CORPORATION

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1682E

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ROM PATTERN SPEC

PAGE 5 OF 9

DPC PART NUMB: 21-088A2
ORIGINATOR: LARRY MARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 108 | 154 | 1101 | 15 |
| 109 | 155 | 1100 | 14 |
| 110 | 156 | 0010 | 02 |
| 111 | 157 | 0010 | 02 |
| 112 | 160 | 1101 | 15 |
| 113 | 161 | 0110 | 06 |
| 114 | 162 | 1101 | 15 |
| 115 | 163 | 1001 | 11 |
| 116 | 164 | 1010 | 12 |
| 117 | 165 | 1110 | 16 |
| 118 | 166 | 0010 | 02 |
| 119 | 167 | 0011 | 03 |
| 120 | 170 | 1010 | 12 |
| 121 | 171 | 1101 | 15 |
| 122 | 172 | 0001 | 01 |
| 123 | 173 | 0000 | 00 |
| 124 | 174 | 0000 | 00 |
| 125 | 175 | 0000 | 00 |
| 126 | 176 | 1111 | 17 |
| 127 | 177 | 1100 | 14 |
| 128 | 200 | 1111 | 17 |
| 129 | 201 | 1111 | 17 |
| 130 | 202 | 1111 | 17 |
| 131 | 203 | 1111 | 17 |
| 132 | 204 | 1111 | 17 |
| 133 | 205 | 1011 | 13 |
| 134 | 206 | 1111 | 17 |
| 135 | 207 | 1000 | 10 |
| 136 | 210 | 0000 | 00 |
| 137 | 211 | 0000 | 00 |
| 138 | 212 | 1111 | 17 |
| 139 | 213 | 0000 | 00 |
| 140 | 214 | 1101 | 15 |
| 141 | 215 | 0011 | 03 |
| 142 | 216 | 1101 | 15 |
| 143 | 217 | 0010 | 02 |

DIGITAL EQUIPMENT CORPORATION

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ROM PATTERN SPEC

DEC PART NUMB: 23-08RA2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 144 | 220 | 1010 | 12 |
| 145 | 221 | 1010 | 12 |
| 146 | 222 | 1011 | 13 |
| 147 | 223 | 1010 | 12 |
| 148 | 224 | 1111 | 17 |
| 149 | 225 | 1000 | 10 |
| 150 | 226 | 1000 | 10 |
| 151 | 227 | 0000 | 00 |
| 152 | 230 | 0000 | 00 |
| 153 | 231 | 0000 | 00 |
| 154 | 232 | 0010 | 02 |
| 155 | 233 | 1111 | 17 |
| 156 | 234 | 0010 | 02 |
| 157 | 235 | 0110 | 06 |
| 158 | 236 | 1101 | 15 |
| 159 | 237 | 0100 | 04 |
| 160 | 240 | 1101 | 15 |
| 161 | 241 | 0110 | 06 |
| 162 | 242 | 1101 | 15 |
| 163 | 243 | 0011 | 03 |
| 164 | 244 | 1010 | 12 |
| 165 | 245 | 0100 | 04 |
| 166 | 246 | 1110 | 16 |
| 167 | 247 | 0100 | 04 |
| 168 | 250 | 1101 | 15 |
| 169 | 251 | 0010 | 02 |
| 170 | 252 | 1111 | 17 |
| 171 | 253 | 1000 | 10 |
| 172 | 254 | 0110 | 06 |
| 173 | 255 | 1001 | 11 |
| 174 | 256 | 0111 | 07 |
| 175 | 257 | 1110 | 16 |
| 176 | 260 | 0010 | 02 |
| 177 | 261 | 0101 | 05 |
| 178 | 262 | 1101 | 15 |
| 179 | 263 | 0100 | 04 |

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DIGITAL EQUIPMENT CORPORATION

6882E

K-RL-M8317-0-11

ROM PATTERN SPEC

DEC PART NUMB: 23-08RA2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 180 | 264 | 1101 | 15 |
| 181 | 265 | 0110 | 06 |
| 182 | 266 | 1101 | 15 |
| 183 | 267 | 0001 | 01 |
| 184 | 270 | 1010 | 12 |
| 185 | 271 | 1110 | 16 |
| 186 | 272 | 1110 | 16 |
| 187 | 273 | 0010 | 02 |
| 188 | 274 | 1111 | 17 |
| 189 | 275 | 1000 | 10 |
| 190 | 276 | 0011 | 03 |
| 191 | 277 | 1110 | 16 |
| 192 | 300 | 1110 | 16 |
| 193 | 301 | 0010 | 02 |
| 194 | 302 | 0111 | 07 |
| 195 | 303 | 1110 | 16 |
| 196 | 304 | 1111 | 17 |
| 197 | 305 | 0000 | 00 |
| 198 | 306 | 0100 | 04 |
| 199 | 307 | 1110 | 16 |
| 200 | 310 | 0010 | 02 |
| 201 | 311 | 1101 | 15 |
| 202 | 312 | 1010 | 12 |
| 203 | 313 | 1101 | 15 |
| 204 | 314 | 1110 | 16 |
| 205 | 315 | 0110 | 06 |
| 206 | 316 | 1110 | 16 |
| 207 | 317 | 0010 | 02 |
| 208 | 320 | 0110 | 06 |
| 209 | 321 | 1101 | 15 |
| 210 | 322 | 1010 | 12 |
| 211 | 323 | 0001 | 01 |
| 212 | 324 | 1111 | 17 |
| 213 | 325 | 1111 | 17 |
| 214 | 326 | 0111 | 07 |
| 215 | 327 | 1111 | 17 |

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DIGITAL EQUIPMENT CORPORATION

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ROM PATTERN SPEC

PAGE 8 OF 9

DEC PART NUMB: 23-088A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 216 | 330 | 1111 | 17 |
| 217 | 331 | 1000 | 10 |
| 218 | 332 | 1000 | 10 |
| 219 | 333 | 0000 | 00 |
| 220 | 334 | 0000 | 00 |
| 221 | 335 | 0000 | 00 |
| 222 | 336 | 0000 | 00 |
| 223 | 337 | 0000 | 00 |
| 224 | 340 | 0000 | 00 |
| 225 | 341 | 0000 | 00 |
| 226 | 342 | 0000 | 00 |
| 227 | 343 | 0000 | 00 |
| 228 | 344 | 0000 | 00 |
| 229 | 345 | 0000 | 00 |
| 230 | 346 | 0000 | 00 |
| 231 | 347 | 0000 | 00 |
| 232 | 350 | 0000 | 00 |
| 233 | 351 | 0000 | 00 |
| 234 | 352 | 0000 | 00 |
| 235 | 353 | 0000 | 00 |
| 236 | 354 | 0000 | 00 |
| 237 | 355 | 0000 | 00 |
| 238 | 356 | 0000 | 00 |
| 239 | 357 | 0000 | 00 |
| 240 | 360 | 0000 | 00 |
| 241 | 361 | 0000 | 00 |
| 242 | 362 | 0000 | 00 |
| 243 | 363 | 0000 | 00 |
| 244 | 364 | 0000 | 00 |
| 245 | 365 | 0000 | 00 |
| 246 | 366 | 0000 | 00 |
| 247 | 367 | 0000 | 00 |
| 248 | 370 | 0000 | 00 |
| 249 | 371 | 0000 | 00 |
| 250 | 372 | 0000 | 00 |
| 251 | 373 | 0000 | 00 |

Digital EQUIPMENT CORPORATION

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ROM PATTERN SPEC

PAGE 9 OF 9

DEC PART NUMB: 23-088A2
ORIGINATOR: LARRY NARHI
DATE OF ORIGIN: 7-16-74

| DECIMAL LOC | OCTAL LOC | BINARY DATA | OCTAL DATA |
|-------------|-----------|-------------|------------|
| 252 | 374 | 0000 | 00 |
| 253 | 375 | 0000 | 00 |
| 254 | 376 | 0000 | 00 |
| 255 | 377 | 0000 | 00 |

Digital EQUIPMENT CORPORATION

K-RL-M8317-Ø-11