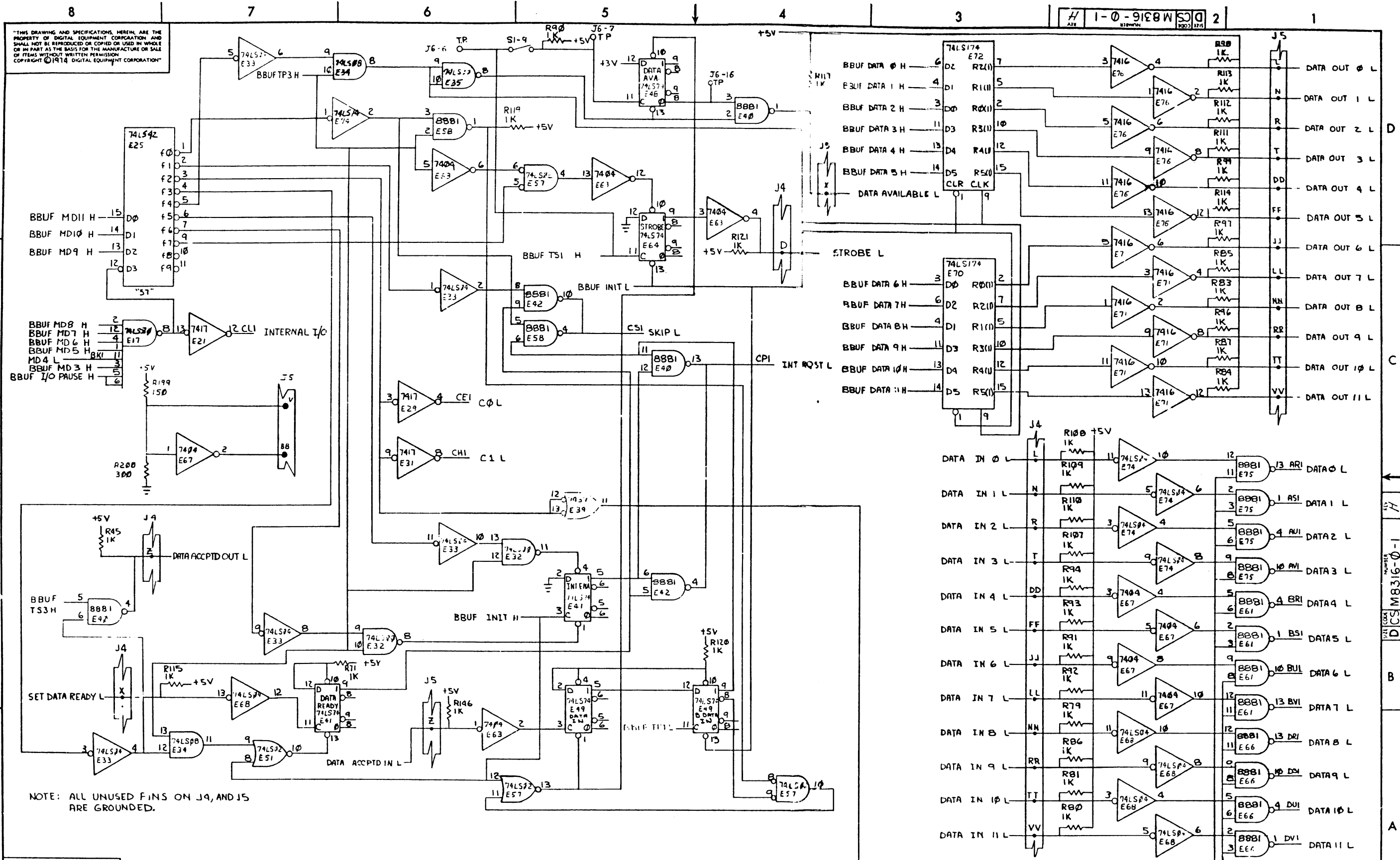


DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS		DATE 11/19/74			
ENGINEERING SPECIFICATION					
TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR DKC8-A					
REVISIONS					
REV	DESCRIPTION	CHG NO	DATE	APPD BY	DATE
ENG. <i>Mahe</i> 12/20/74 APPD <i>Paul W. ...</i>		SIZE	CODE	NUMBER	REV
		A	SP	DKC8-A-1	1 of 4

ENGINEERING SPECIFICATION		CONTINUATION SHEET																			
TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR DKC8-A																					
I GENERAL	This procedure defines the performance standard required of the DKC8*, option board #1. This procedure refers to both system acceptance and add-on acceptance. NOTE: If DKC8 was shipped as part of a PDP-8A system, proceed to installation procedure. * Serial Line Unit Real Time Clock Parallel I/O Programmer's Console Logic																				
II INSPECTION	After removing the DKC8 from the packing material, inspect the module for the following: 1. Inventory hardware against shipping list. 2. Inventory software against software list, if ordered. 3. Inventory prints against shipping list, if ordered. 4. Check hardware for loose or broken components.																				
III INSTALLATION PROCEDURE	Install the equipment using the following procedure: 1. Set up switches as indicated by the diagnostic write up. <table border="0"> <tr> <td>SI-1 thru SI-3</td> <td>"ON"</td> <td>9600 baud</td> </tr> <tr> <td>SI-4</td> <td>"ON"</td> <td>Normally "ON"</td> </tr> <tr> <td>SI-5</td> <td>"ON"</td> <td>Real Time Clock Enable</td> </tr> <tr> <td>SI-6</td> <td>"ON"</td> <td>Normally "ON"</td> </tr> <tr> <td>SI-7</td> <td>"ON"</td> <td>One Stop Bit</td> </tr> <tr> <td>SI-8</td> <td>"OFF"</td> <td>Disable TTY 20 MA Filter</td> </tr> </table> NOTE: Reference Operator's Handbook for switch setting descriptions. 2. Insert TTY loop back cable (DEC Part #7008517) on DKC8. 3. Insert parallel I/O cable loop back cable (DEC Part # BC08R-1) on DKC8.			SI-1 thru SI-3	"ON"	9600 baud	SI-4	"ON"	Normally "ON"	SI-5	"ON"	Real Time Clock Enable	SI-6	"ON"	Normally "ON"	SI-7	"ON"	One Stop Bit	SI-8	"OFF"	Disable TTY 20 MA Filter
SI-1 thru SI-3	"ON"	9600 baud																			
SI-4	"ON"	Normally "ON"																			
SI-5	"ON"	Real Time Clock Enable																			
SI-6	"ON"	Normally "ON"																			
SI-7	"ON"	One Stop Bit																			
SI-8	"OFF"	Disable TTY 20 MA Filter																			
DEC FORM NO DEC 16-(191)-1022-N370 DMA 106		SIZE	CODE																		
		A	SP																		
		NUMBER	REV																		
		DKC8-A-1	4																		
		SHEET 2 OF 4																			

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE FIELD INSTALLATION AND ACCEPTANCE PROCEDURE FOR DKC8-A			
III INSTALLATION PROCEDURE (continued)	4. Insert two programmer's console cables on DKC8. 5. Insure that the 8A Power is removed from the Omnibus™. 6. Insert DKC8 into the second or third slot of the Omnibus™. 7. Turn the power back "ON". 8. Check the operation of the programmer's console.		
IV ACCEPTANCE PROCEDURE	Perform the acceptance procedure defined in Table . . . If abnormal indications are encountered, refer to the diagnostic listing for type of error. Reference the diagnostic write ups and operator's manual for instructions on loading diagnostics. Equipment Required: 1. PDP-8A with 1K or more R/W Memory 2. Paper Tape Input Device 3. Programmer's Console (KC8-A) 4. Diagnostic and Listings 5. TTY loop Back Cable 6. Parallel I/O Loop Back Cable 7. 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.		
DEC FORM NO DEC 16-(191)-1022-N370 DMA 106		SIZE	CODE
		A	SP
		NUMBER	REV
		DKC8-A-1	4
		SHEET 3 OF 4	

ENGINEERING SPECIFICATION		CONTINUATION SHEET																									
TITLE FIELD INSTALLATION: 5 ACCEPTANCE PROCEDURE FOR DKC8-A																											
Acceptance of DKC8 with 4K or More R/W Memory	<table border="0"> <tr> <td>Program Name</td> <td>MainDec #</td> <td>Accept Time</td> <td>Restiction</td> </tr> <tr> <td>DKC8-AA Option Test #1</td> <td>08-DJDKA-PB</td> <td>30 min</td> <td>4K R/W Memory</td> </tr> </table> Acceptance of DKC8 with less than 1K of R/W Memory <table border="0"> <tr> <td>DKC8-AA Option Test #1</td> <td>08-DJDKA -PM1</td> <td>10 min</td> <td>1K R/W Memory</td> </tr> <tr> <td>Segment #1 (RIM)</td> <td>08-DJDKA -PM2</td> <td>10 min</td> <td>1K R/W Memory</td> </tr> <tr> <td>DKC8-AA Option Test #1</td> <td>08-DJDKA -PM3</td> <td>10 min</td> <td>1K R/W Memory</td> </tr> <tr> <td>Segment #3 (RIM)</td> <td>08-DJDKA -PM4</td> <td>10 min</td> <td>1K R/W Memory</td> </tr> </table>			Program Name	MainDec #	Accept Time	Restiction	DKC8-AA Option Test #1	08-DJDKA-PB	30 min	4K R/W Memory	DKC8-AA Option Test #1	08-DJDKA -PM1	10 min	1K R/W Memory	Segment #1 (RIM)	08-DJDKA -PM2	10 min	1K R/W Memory	DKC8-AA Option Test #1	08-DJDKA -PM3	10 min	1K R/W Memory	Segment #3 (RIM)	08-DJDKA -PM4	10 min	1K R/W Memory
Program Name	MainDec #	Accept Time	Restiction																								
DKC8-AA Option Test #1	08-DJDKA-PB	30 min	4K R/W Memory																								
DKC8-AA Option Test #1	08-DJDKA -PM1	10 min	1K R/W Memory																								
Segment #1 (RIM)	08-DJDKA -PM2	10 min	1K R/W Memory																								
DKC8-AA Option Test #1	08-DJDKA -PM3	10 min	1K R/W Memory																								
Segment #3 (RIM)	08-DJDKA -PM4	10 min	1K R/W Memory																								
DEC FORM NO DEC 16-(191)-1022-N370 DMA 106		SIZE	CODE																								
		A	SP																								
		NUMBER	REV																								
		DKC8-A-1	4																								
		SHEET 4 OF 4																									



"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. COPYRIGHT © 1974 DIGITAL EQUIPMENT CORPORATION"

1-0-9188W SCD 2

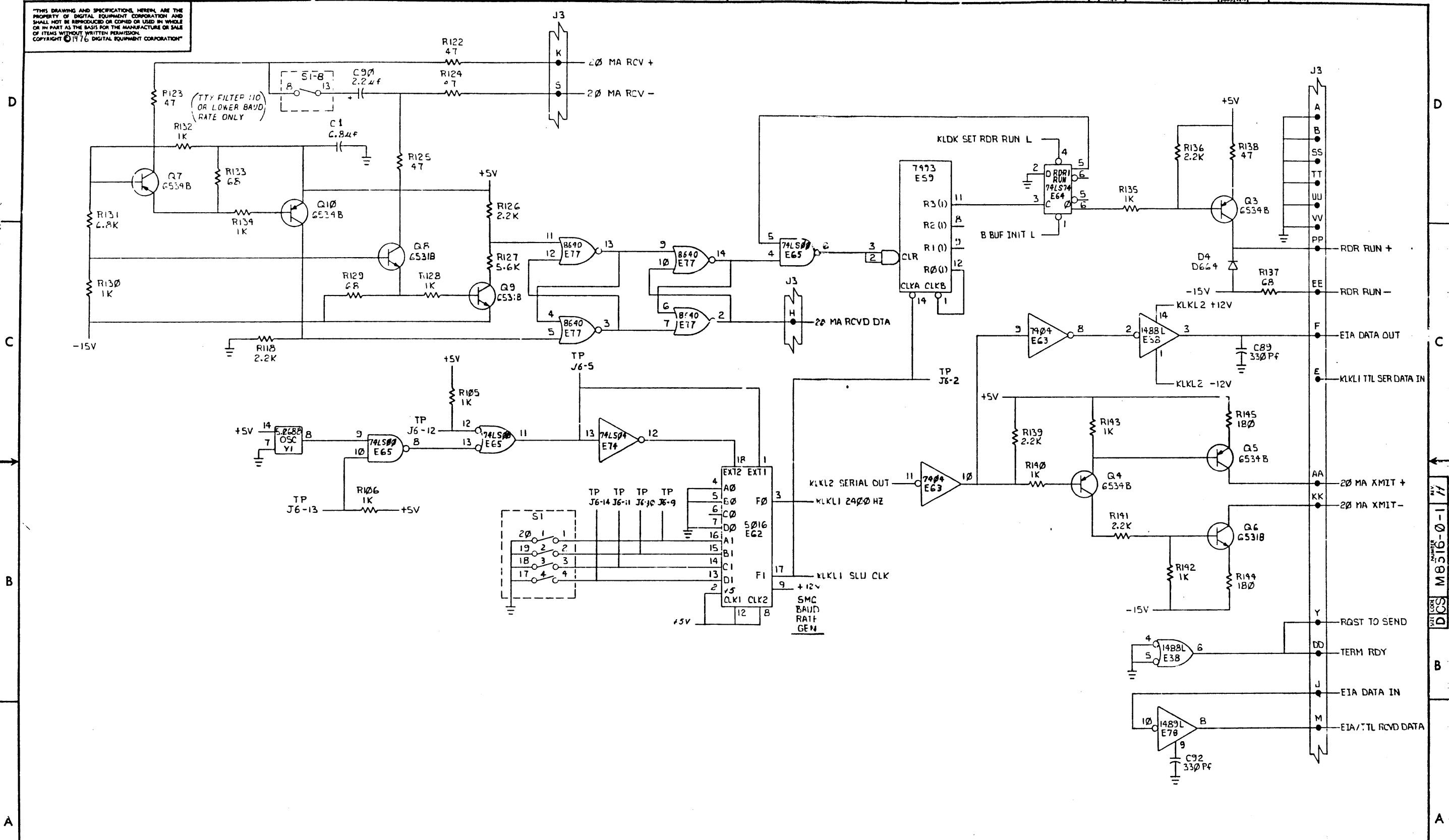
REVISIONS		
CHK	CHANGE NO	REV

TITLE	OPTION BD #1	SIZE CODE	D CS	NUMBER	MB316-0-1	REV.	H
SCALE	1:1	SHEET	2	OF	2	DIST.	

(12 BIT PARALLEL I/O)

DCS MB316-0-1 H

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. COPYRIGHT © 1976 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

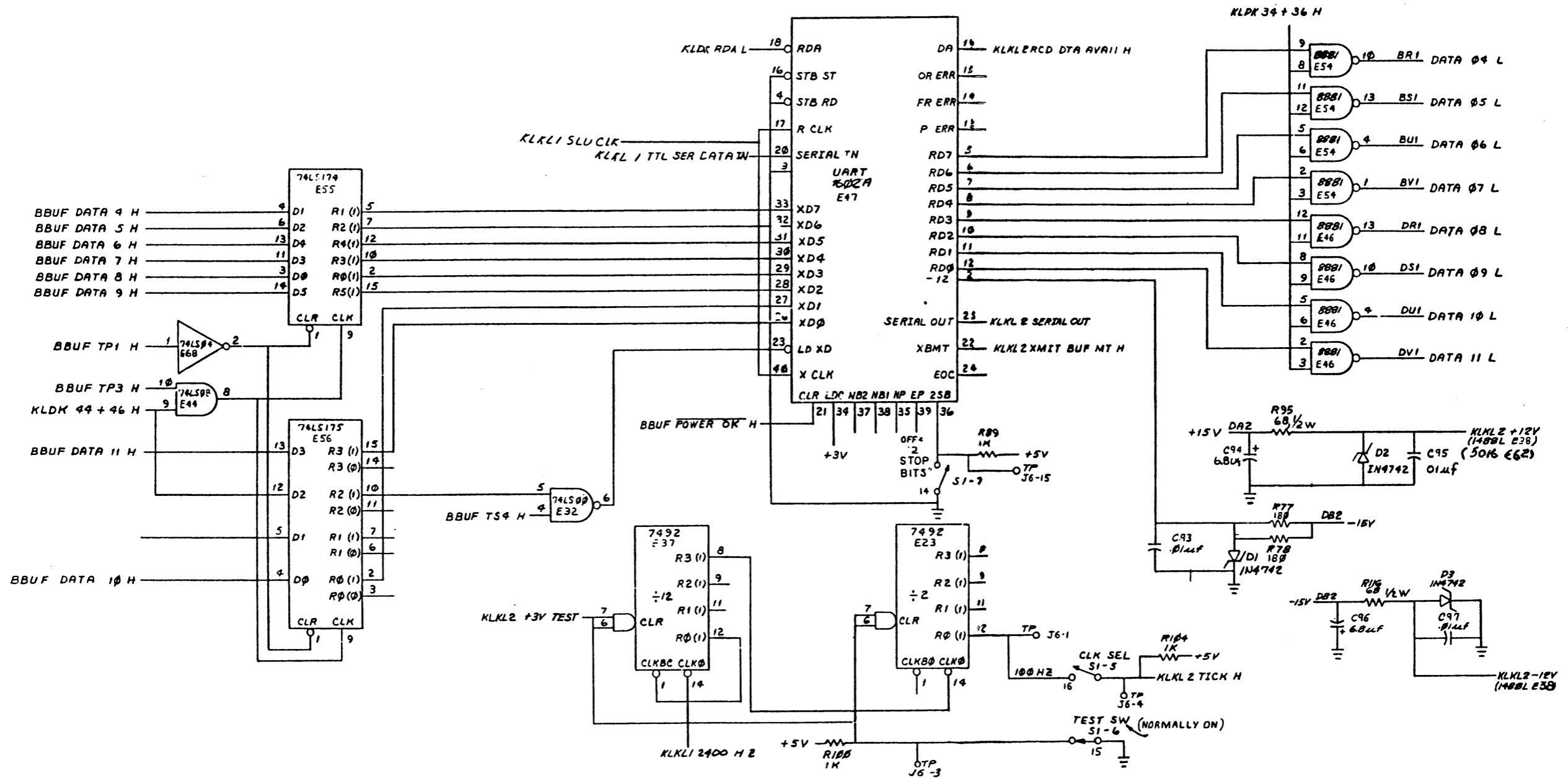
(BAUD RATE GEN & 20 MA. EIA DRIVERS/RECEIVERS)

TITLE	OPTION BD #1 (KLKL)	SIZE CODE	D CS	NUMBER	M8316-0-1	REV.	H
SCALE	---	SHEET	4	OF	8	DIST.	

"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. COPYRIGHT © 1974, DIGITAL EQUIPMENT CORPORATION"

D
C
B
A

D
C
B
A

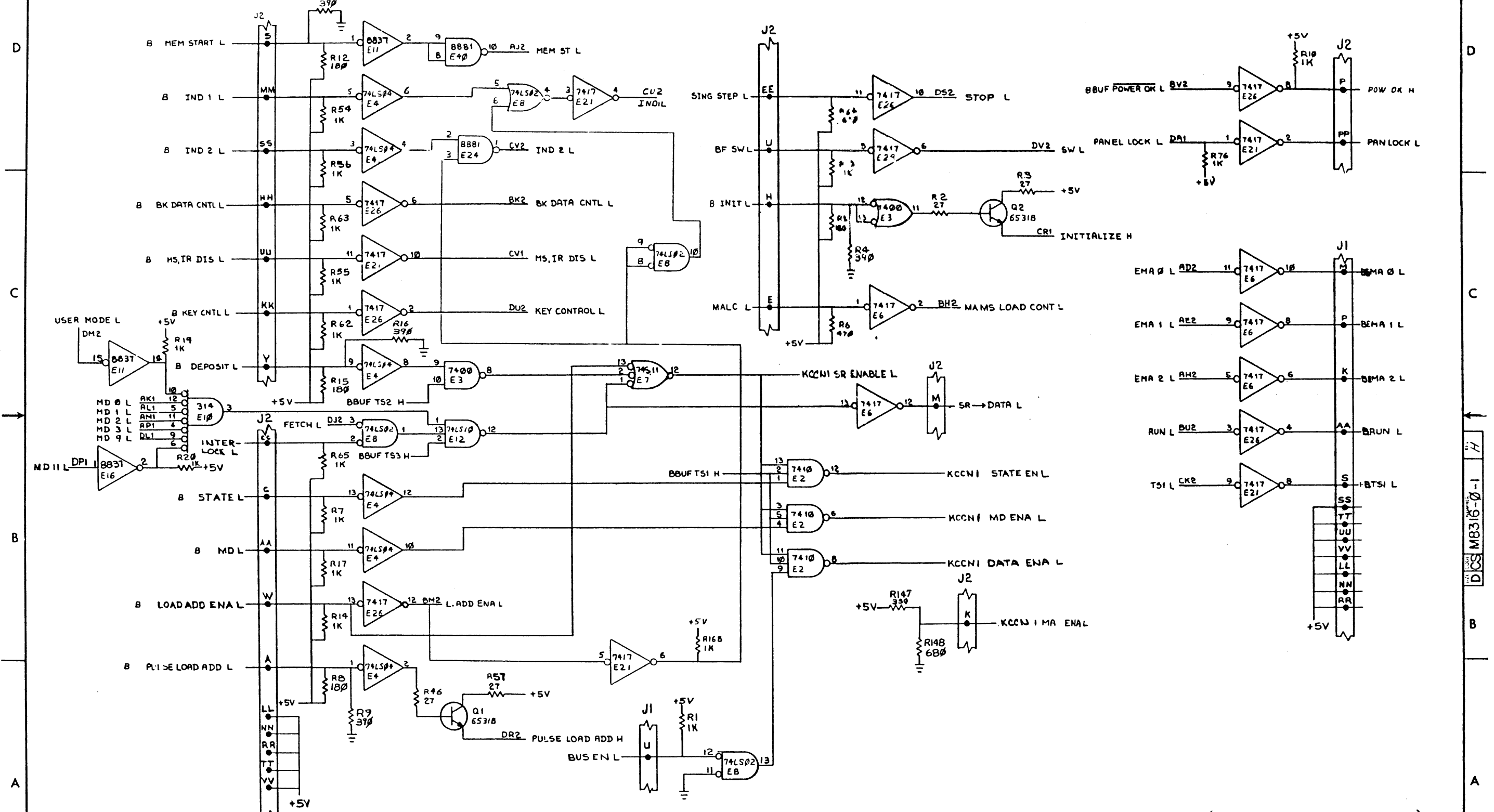


REVISIONS		
CHK	CHANGE NO	REV

(UART & XTAL CLK FREQ SOURCE)

TITLE	OPTION BD *1 (KLKL 2)	SIZE CODE	DCS	NUMBER	M8315-0-1	REV.	H
SCALE	1/1	SHEET	2	OF 8	DIST.		

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. COPYRIGHT © 1974 DIGITAL EQUIPMENT CORPORATION.

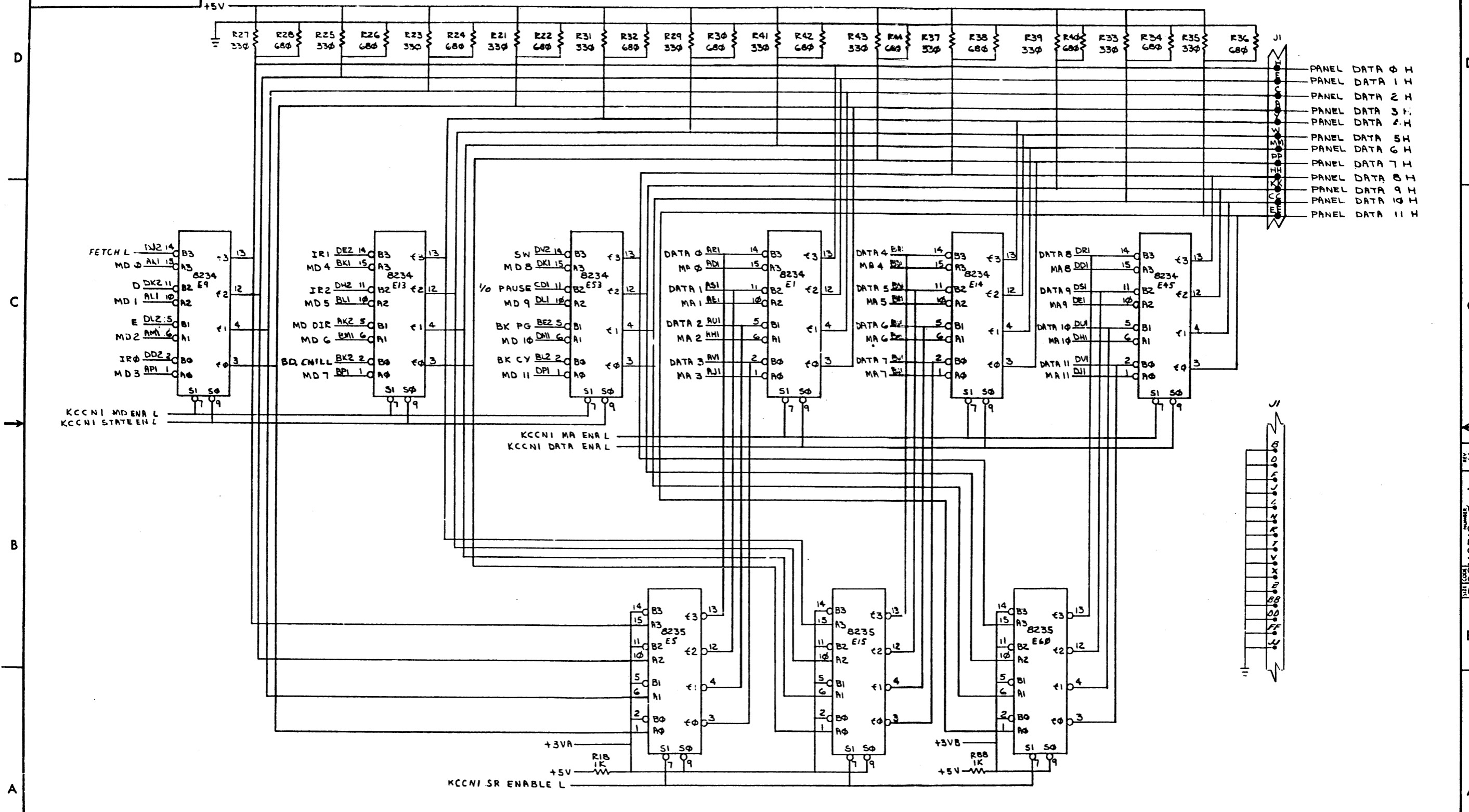


(PROGRAMMER'S PANEL CONTROL)

REVISIONS		
CHK	CHANGE NO	REV

TITLE	OPTION BD #1 (KCCN#1)	SIZE CODE	DCS	NUMBER	M8316-0-1	REV.	H
SCALE	1"=1"	SHEET	6	OF	8	DIST.	

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. COPYRIGHT © 1974 DIGITAL EQUIPMENT CORPORATION

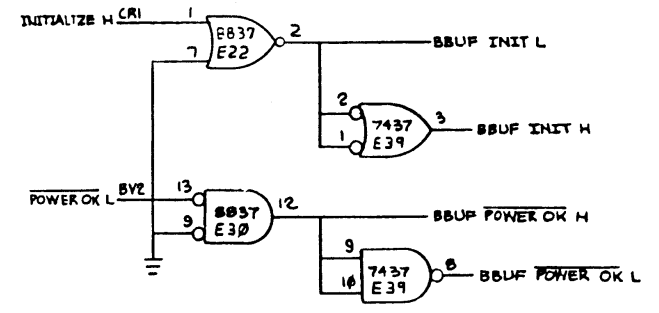
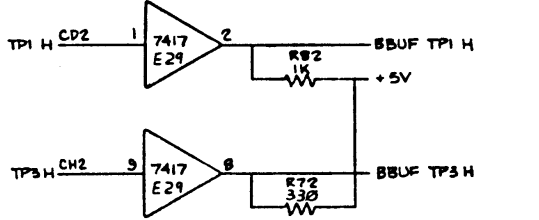
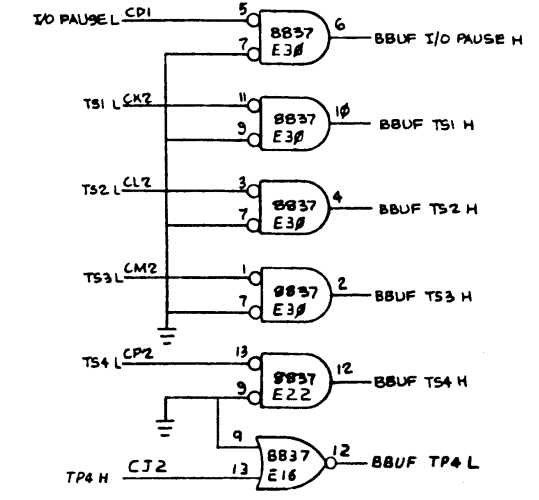
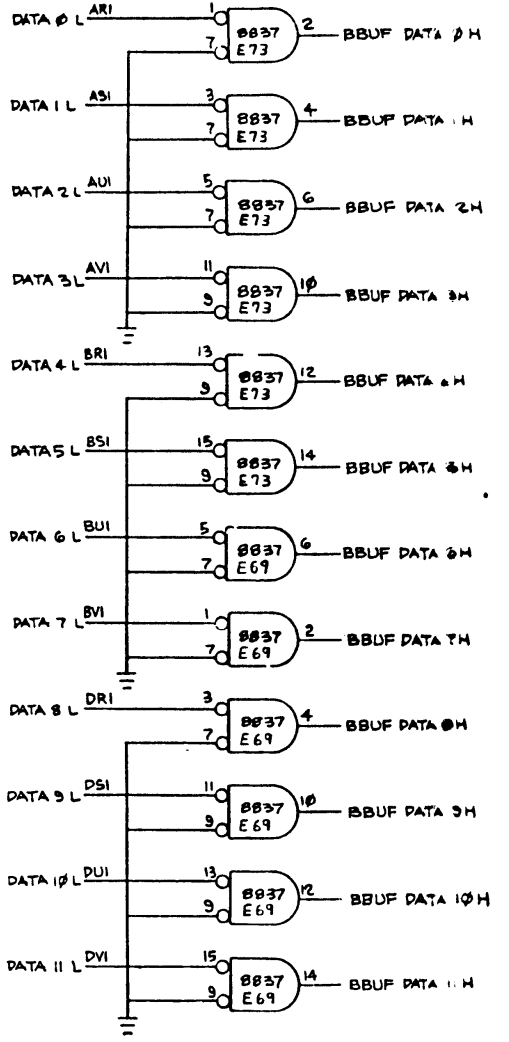
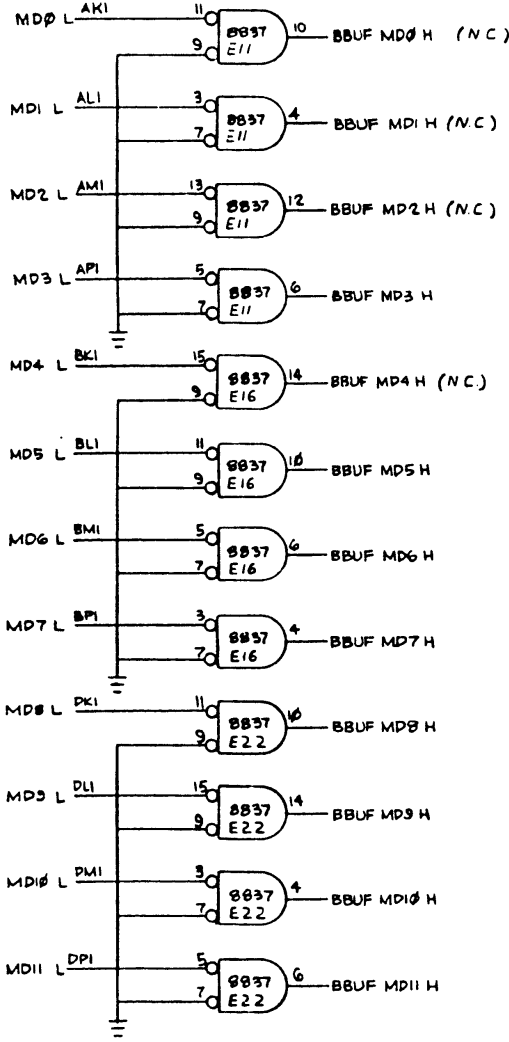


(PROGRAMMERS PANEL MULTIPLEXERS)

REVISIONS		
CHK	CHANGE NO	REV.

TITLE	OPTION BOARD #1 (KCCND)	SIZE CODE	DCSM8316-0-1	NUMBER	1	REV.	H
SCALE	1:1	SHEET	7 OF 8	DIST.			

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. COPYRIGHT © 1974 DIGITAL EQUIPMENT CORPORATION



(BUS BUFFERS)

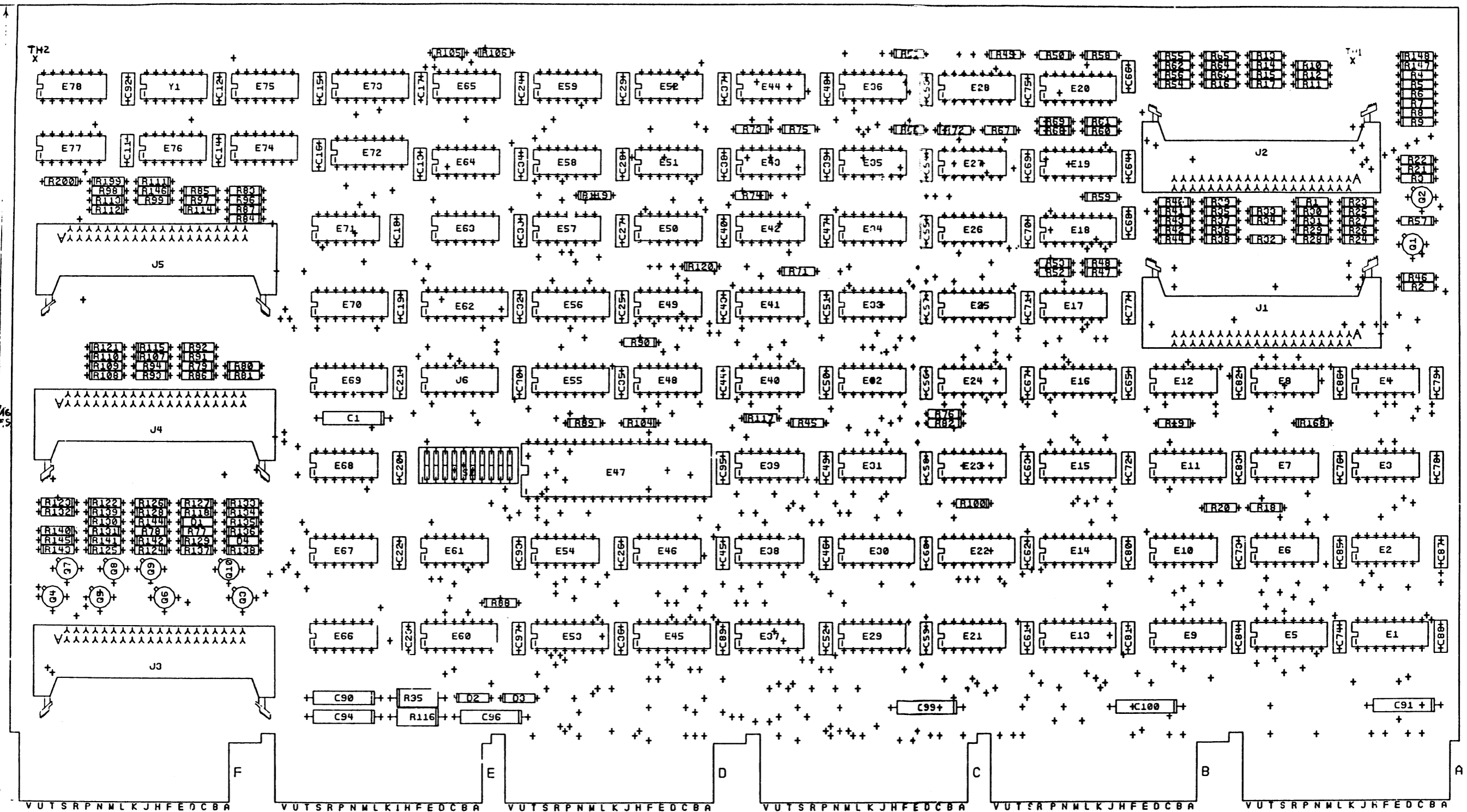
REVISIONS		
CHK	CHANGE NO	REV

TITLE	8/A INTERNAL OPTIONS (BUFF)	SIZE CODE	D CS	NUMBER	M3316-0-i	REV.	H
SCALE	1:1	SHEET	B	OF B		DIST.	

M3316-0-1

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. © 1976 DIGITAL EQUIPMENT CORPORATION

COMPONENT SIDE VIEW



VUTSRPNMLKJHFEDCBA

NOTES:

CHK	CHANGE NO	REV	DATE	BY

HOLE DATA	
SYMBOL	
FIN HOLE SIZE	
PLATED	
NON PLATED	
QTY.	
○-OFF GRID HLE	
DRILL SIZE	

BOARD FABRICATION INFORMATION	
PANEL SIZE	
PANEL DATA DWG.#	
PANEL MAT'L	
QTY. OF LAYERS	
COPPER THICKNESS	
PTH, X PRINT AND ETCH	
CON. REINSERTED 180 TIMES OR MORE?	
P.C. DESIGN D'TR BASE REV.	

SIGNATURES		DATE
DRN. <i>Vincent...</i>		1-3-76
CHK'D. <i>...</i>		1-5-76
ENG. <i>...</i>		1-2-76
PROJ. ENG. <i>...</i>		1-2-76
PROD.		
SCALE 2/1		
SHT. 1 OF 3		
NEXT HIGHER ASSY. B-DD-M8316-0		

digital

TITLE
OPTION BOARD 1

SIZE CODE	NUMBER	REV
D UA	M8316-0-0	*

8

7

6

5

4

3

* 0-0-91E8W DUA 2

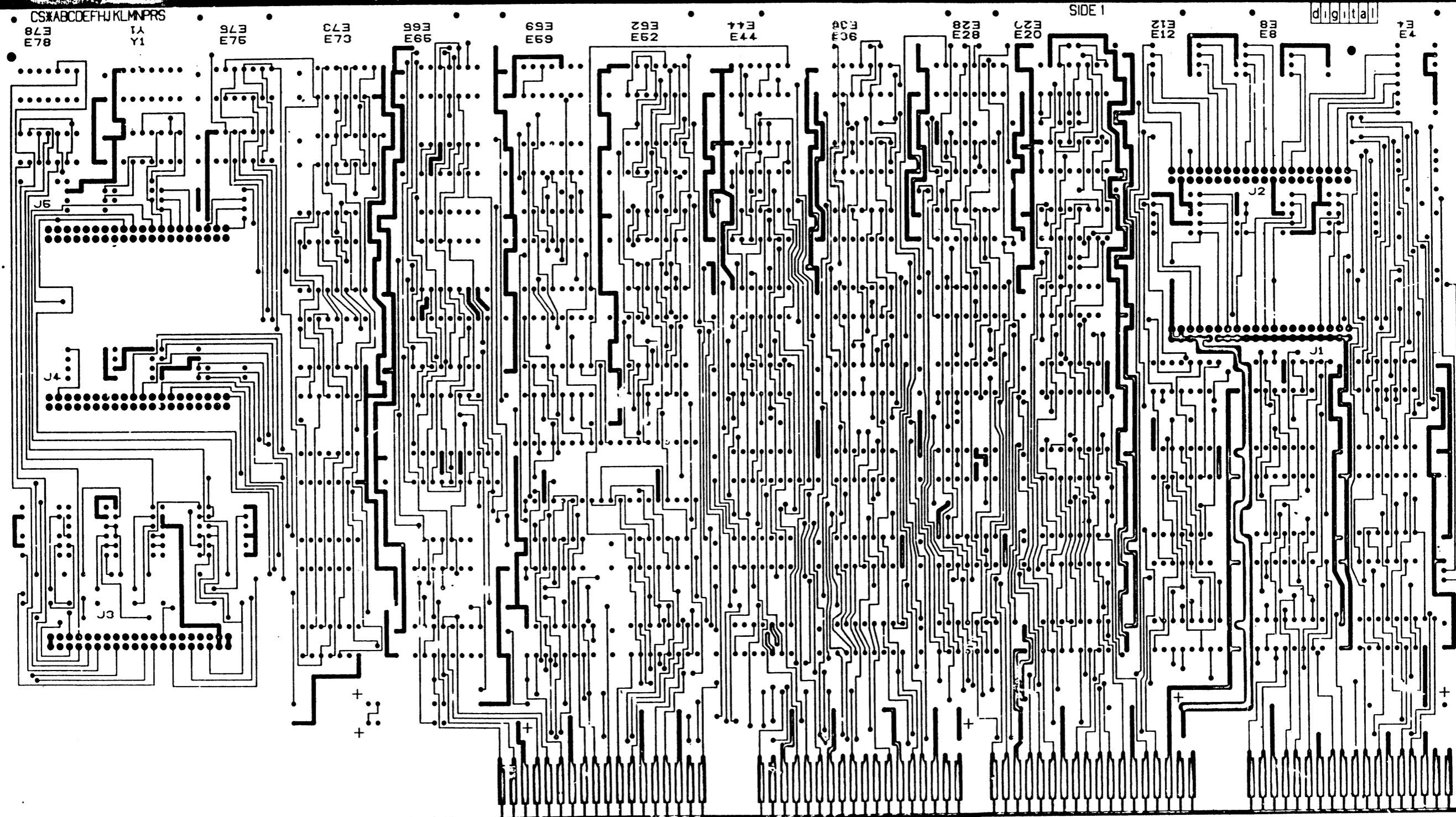
1

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. COPY 4-IT © 1976 DIGITAL EQUIPMENT CORPORATION

L1

MS40662 M0316 6010900D P4

D



C

B

A

D

C

B

A

REVISIONS		
CHK	CHANGE NO	REV

TITLE	OPTION BOARD #1	SIZE/CODE	DUA	NUMBER	M8316-0-0	REV	*
SCALE	2/1	SHEET	2 OF 3	DIST			

8 7 6 5 4 3 2 1

DUA M8316-0-0 *

8

7

6

5

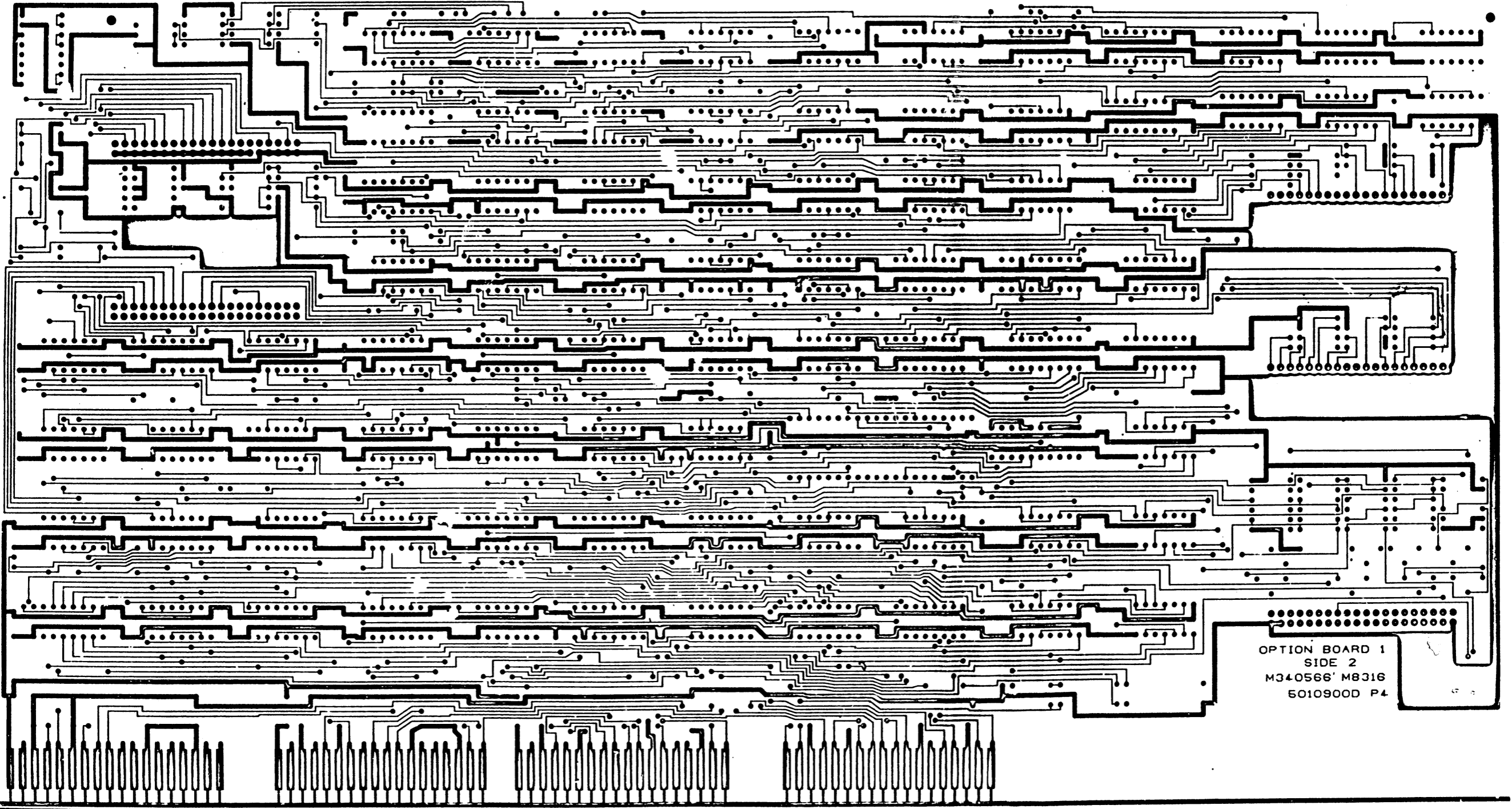
4

3

1

* 0-0-918W DUA M8316-0-0 2

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. COPYRIGHT © 1976 DIGITAL EQUIPMENT CORPORATION



OPTION BOARD 1
SIDE 2
M340566 M8316
6010900 P4

REVISIONS		
CHK	CHANGE NO	REV

TITLE	OPTION BOARD #1	SIZE CODE	D UA	NUMBER	M8316-0-0	REV.	*
SCALE	2/1	SHEET	3 OF 3	DIST			

8

7

6

5

↑

4

3

2

1

D
C
*
DUA M8316-0-0
B
A

DIGITAL EQUIPMENT CORPORATION PARTS LIST

QUANTITY / VARIATION

NOTES:

MADE BY BOB KOPPENAL	CHECKED	SECTION
DATE 4 NOV 76	DATE	
ENG	PROD	ISSUED SECTION
DATE	DATE	

ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M8316-Ø-Ø	QUANTITY	VARIATION	REF DESIGNATION
40		1909705	IC., 8881	10			E4Ø, E24, E54, E4Ø, E46, E5Ø, E66, E61, E75, E58
41		1909928	IC., 7416	2			E71, E76
42		1909929	IC., 7417	5			E6, E26, E31, E29, E21
43		1909935	IC., 8235	3			E5, E15, E6Ø
44		1912819	IC., 74LS42	3			E19, E28, E25
45		1912805	IC., 74LSØ8	2			E34, E44
46		1910322	IC., 1488L	1			E38
47		1910323	IC., 1489L	1			E78
48		1909704	IC., 314A	1			E1Ø
49		1911469	IC., 8640	1			E77
50		1910459	IC., 16Ø2A (UART)	1			E47
51		1912853	IC., 74LS175	1			E56
52		1912697	IC., 74LS174	3			E55, E7Ø, E72
53		1910091	IC., 7437	1			E39
54		1911315	IC., 8234	6			E1, E9, E14, E13, E45, E53
55		1911116	IC., 8837	6			E11, E16, E3Ø, E22, E69, E73
56		2112623	IC., 5016 (BAUD RATE GEN.)	1			E62
57		23062A1	ROM #1 KLDK #1, 32 X8	1			E18
58		23063A1	ROM #2 KLDK #2, 32 X 8	1			E2Ø
59		1905575	IC., 7400	1			E3

E.C.O. NO.

