LC8-E
DECwriter control engineering drawings

digital equipment corporation · maynard. massachusetts

MASTER DRAWING LIST

MAINTENANCE MANUALS NO.	TITLE	UNIT VARIATIONS LC8-E	LC8-L
LC8-E	PARALLEL CONT	X	-
LC8-L	PARALLEL CONT	-	X

USED ON OPTIONS							
PDP8-E							
PDP 8-L							
PDP8-F							
PDP8-M							
PDP8-I							
PDP12							

REVISIONS REV.	DATE	CHG. NO.	APP'D.
A	10/71	LC8-1	J.K.
B	4/72	LC8-2	
C	6/72	LC8-3	

DRN. K. GULICK	DATE 7-26-71	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. K. GULICK	DATE 7-26-71	
ENG. John Hall	DATE 7-30-71	TITLE PARALLEL CONTROL FOR LA3Ø-P
PROJ. ENG. John Hall	DATE 7-30-71	
PROD. R. F. Wilson	DATE 8-2-71	
FIRST USED ON PDP8-E		SIZE A / CODE ML / NUMBER LC8-Ø / REV. C
SCALE NONE		
SHEET 1 OF 2		DIST.

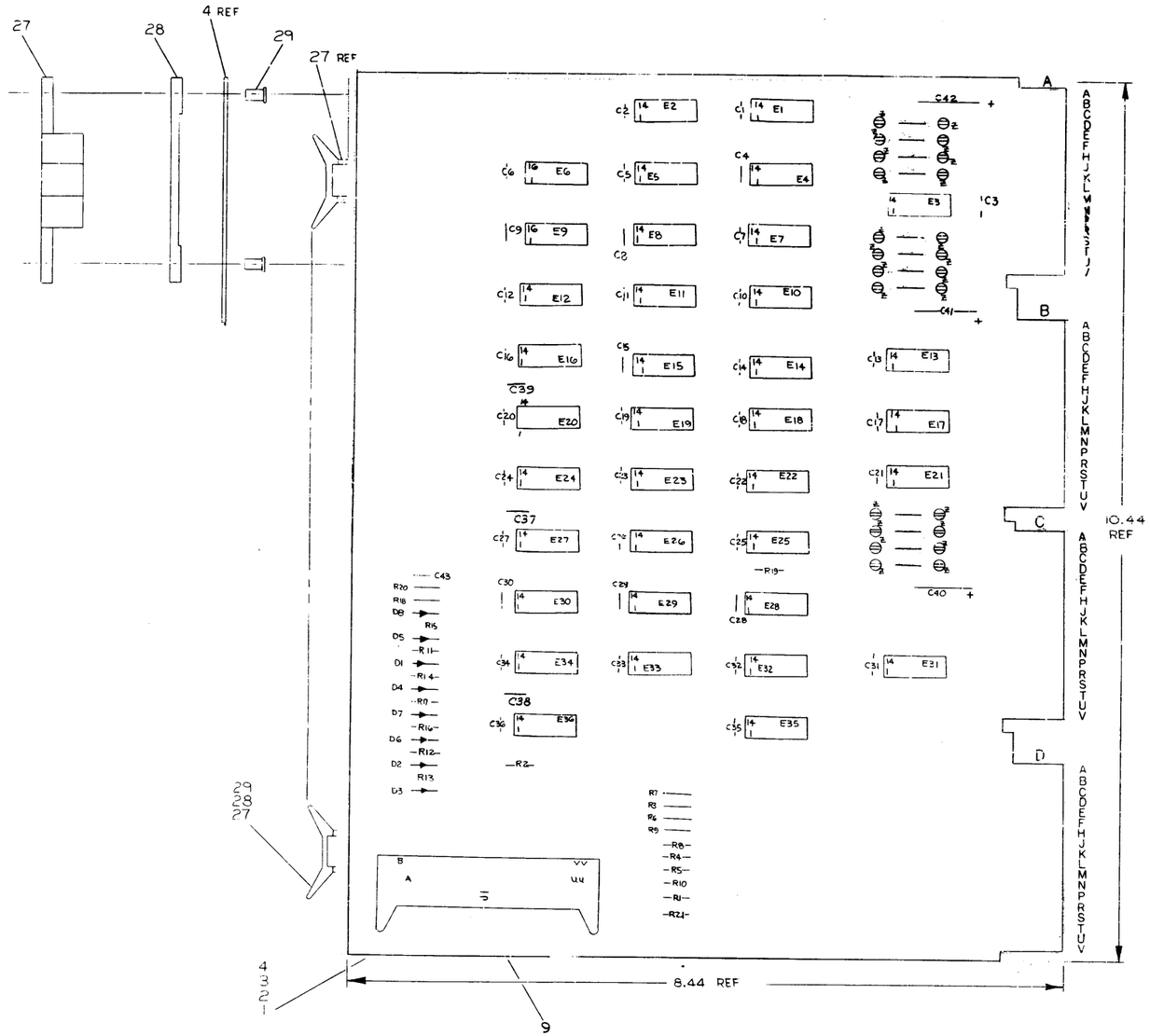
PRINT SET LC8-E	LC8-L	DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE	OPTION NO.
X	-	E-CS-M8329-Ø-1	#	2	PARALLEL INTERFACE	
X	-	D-IA-7008417-0-0		1	INTERFACE CABLE	LC11
X	-	A-SP-LC8-E-1		10	ENGINEERING SPECIFICATION	
-		A-SP-LC8-E-2	A	2	ACCEPTANCE PROCEDURE	
-		A -SP-LC8-E-3		2	TEST PROCEDURE	
X	-	LIBKIT-8E-LC8E		REF	SOFTWARE KIT LIST	
-	X	D-CS- M7718-0-1	#	1	KEYBOARD INTERFACE	
-	X	C-CS- M7719-0-1	#	1	TRANSMIT DATA	
-	X	D-IA- 7008514-0-0		1	INTERFACE CABLE LC8-L	
-	X	A-SP-LC8-L-1		5	ENGINEERING SPECIFICATION	
-	X	A-SP-LC8-L-2		2	TEST PROCEDURE	
-	X	A-SP-LC8-L-3		3	ACCEPTANCE PROCEDURE	
X	X	A-AL-LC8-0-1		1	ACCESSORY LIST	

TITLE				
PARALLEL CONTROL FOR LA3Ø-P	SHEET 2 OF 2	SIZE A / CODE ML	NUMBER LC8-Ø	REV. C

DRA 132

DEC 16-(325)-1048-1-N471

NOTES:
1. UNLESS OTHERWISE SPECIFIED:
   RESISTORS ARE 220, 1/4W, 5%
   CAPACITORS ARE .01UF, 100V, 10%



IC TYPE	GND	+5V
DEC 5314	1	8
DEC 5380	1	8
DEC 5384	1	8
DEC 7442	8	16

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT
30	22	W12-A	W12-B
		W11-A	W11-B
		W10-A	W10-B
		W9-A	W9-B
		W8-A	W8-B
		W7-A	W7-B
		W6-A	W6-B
		W5-A	W5-B
		W4-A	W4-B
		W3-A	W3-B
		W2-A	W2-B
30	22	W1-A	W1-B

JUMPER LIST

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
AR		WIRE #22 AWG SOLID BUS	9107560-01	30
8		EYELET GS4-11 STIMPSON	1[illegible]750	29
4		SPACER (CABLE CLAMP)	1[illegible]704	28
2		HANDLE, FLIP-CHIP MAGENTA	9008337-06	27
2	E2, E31	I.C. DEC 5384	1910394	26
5	E3, E21, E28, E32, E35	I.C. DEC 5380	1910392	25
2	E1, E13	I.C. DEC 5314	1910391	24
2	E6, E9	I.C. DEC 7442	1910966	23
2	E26, E33	I.C. DEC 74L7	1909429	22
4	E14, E17, E18, E22	I.C. DEC 9740[illegible]	1909[illegible]73	21
1	E11	I.C. DEC 7404	1903686	20
1	E19	I.C. DEC 74H00	1909056	19
2	E4, E7	I.C. DEC 7402	1910404	18
1	E15	I.C. DEC 7450	1905580	17
2	E23, E29	I.C. DEC 7440	1905579	16
3	E5, E8, E25	I.C. DEC 7400	1905575	15
9	E10, E12, E16, E20, E24, E27, E30, E34, E36	I.C. DEC 7474	1905547	14
1	R2	RES. 750, 1/4W, 5%	3014[illegible]	13
1	R19	RES. 1K, 1/4W, 5%	3003[illegible]	12
9	R11-R18, R20	RES. 330, 1/4W, 5%	3002[illegible]	11
10	R1, R3-R10, R21	RES. 220, 1/4W, 5%	3002[illegible]	10
1	J1	CONN, RIGHT ANGLE HEADER	1209941	9
8	D1-D8	DIODE D664	1100114	8
39	C1-C39	CAP. .01UF, 100V, 10% DISC	1001610	7
3	C40-C42	CAP. 6.8UF, 35V, 20% TANT	1000067	6
1	C43	CAP. 470PF, 100V, 5% DM	1000024	5
1		ETCHED CIRCUIT BOARD	5009627	4
REF		MODULE ECO HISTORY	3-MH-M8329-0-5	3
REF		ASSY/DRILLING HOLE LAYOUT	2-AH-M8329-0-5	2
REF		X-Y COORDINATE HOLE LOC.	K-CO-M8329-0-4	1

PARTS LIST

ETCH BOARD REV C

DEC NO.	EIA NO.
D664	1N3606

SEMICONDUCTOR CONVERSION CHART

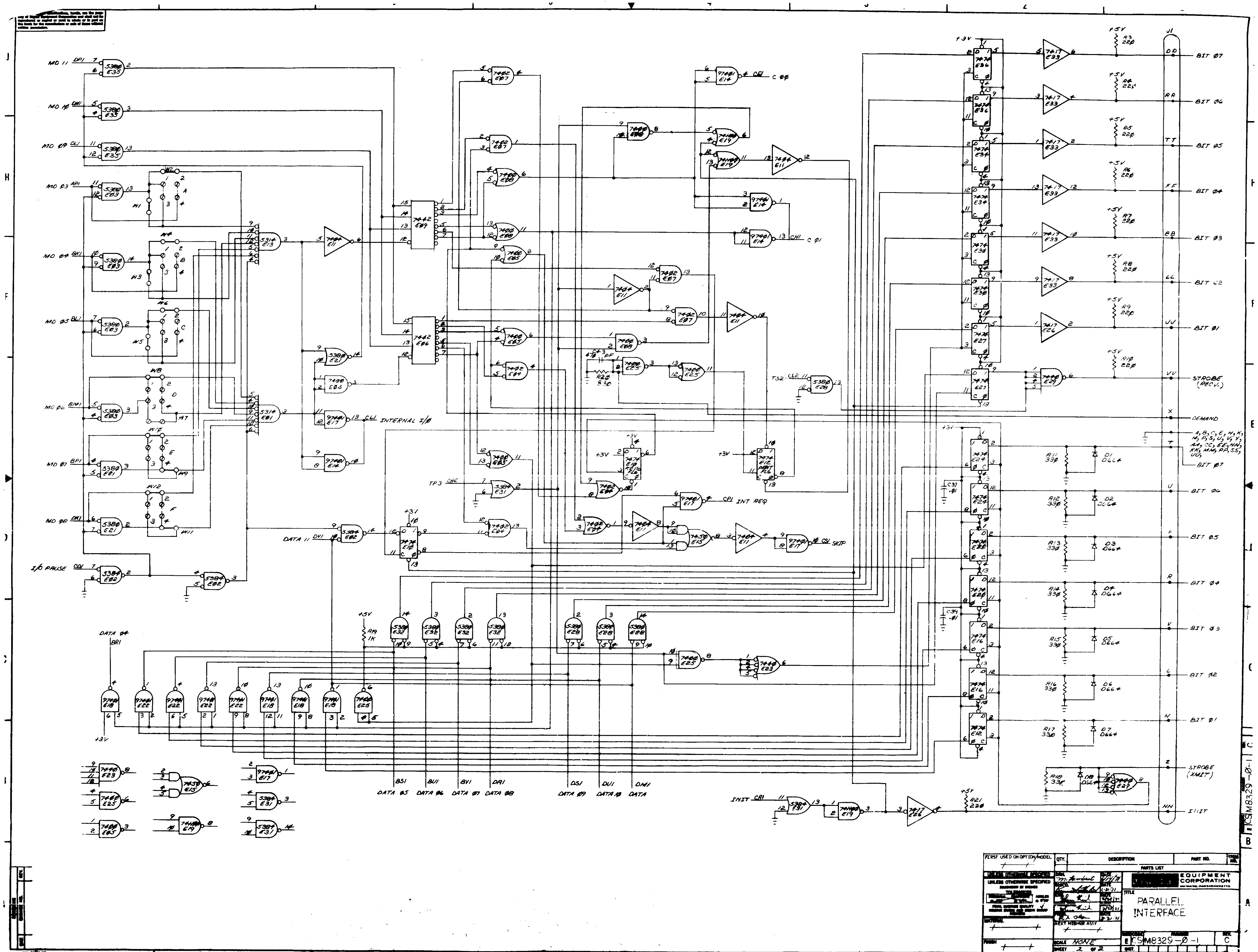
EQUIPMENT CORPORATION

TITLE: PARALLEL INTERFACE

A-PL-LC8-E-0

ECS M8329-0-1 REV. C

SCALE 2/1 SHEET 1 OF 2


MD 11
MD 10
MD 09
MD 03
MD 04
MD 05
MD 06
MD 07
MD 08
I/O PAUSE
DATA 11
DATA 04
INTERNAL I/O
INT REQ
SKIP
TP3
TS2
INIT
BIT 07
BIT 06
BIT 05
BIT 04
BIT 03
BIT 02
BIT 01
STROBE (RECV.)
DEMAND
STROBE (XMIT)
I/I IT
DATA 05
DATA 06
DATA 07
DATA 08
DATA 09
DATA 10
DATA
EQUIPMENT CORPORATION
PARALLEL INTERFACE
SCALE NONE
SHEET 2 OF 2
CS M8329-0-1
C

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM CONNECTION	TO CONNECTION	CUT POINT
6	22 TWP	GRN	P1-E	P2-25	1
		WHT	P1-F	P2-17	2
		BLK	P1-H	P2-23	3
		BLU	P1-J	P2-16	4
		BLU	P1-K	P2-26	5
		RED	P1-L	P2-22	6
		GRN	P1-M	P2-24	7
		YEL	P1-N	P2-5	8
		BRN	P1-P	P2-4	9
		RED	P1-R	P2-18	10
		ORN	P1-S	P2-23	11
		WHT	P1-T	P2-15	12
		RED	P1-U	P2-25	13
		ORN	P1-V	P2-20	14
		BLK	P1-W	P2-3	15
		ORN	P1-X	P2-13	16
	22 TWP	YEL	P1-Y	P2-2	17
6		BLU	P1-Z	P2-7	18

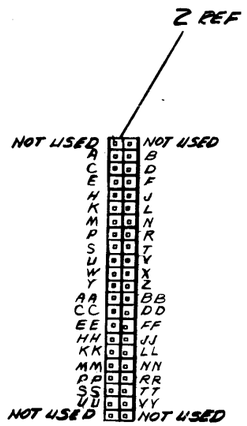
WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM CONNECTION	TO CONNECTION	CUT POINT
6	22 TWP	BLK	P1-AA	P2-3	19
		BRN	P1-BB	P2-10	20
		ORN	P1-CC	P2-1	21
		YEL	P1-DD	P2-6	22
		BLK	P1-EE	P2-4	23
		GRY	P1-FF	P2-9	24
		BLK	P1-HH	P2-4	25
		GRN	P1-JJ	P2-12	26
		BRN	P1-KK	P2-24	27
		WHT	P1-LL	P2-11	28
		GRY	P1-MM	P2-23	29
		RED	P1-NN	P2-14	30
		GRY	P1-PP	P2-2	31
		WHT	P1-RR	P2-8	32
		GRN	P1-SS	P2-1	33
		RED	P1-TT	P2-19	34
	22 TWP	WHT	P1-UU	P2-26	35
6		BLU	P1-VV	P2-21	36

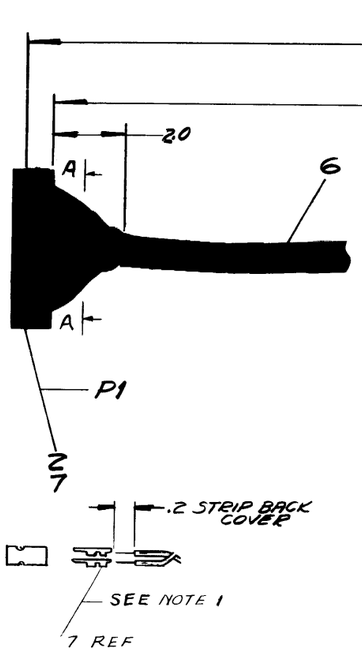
LEGEND

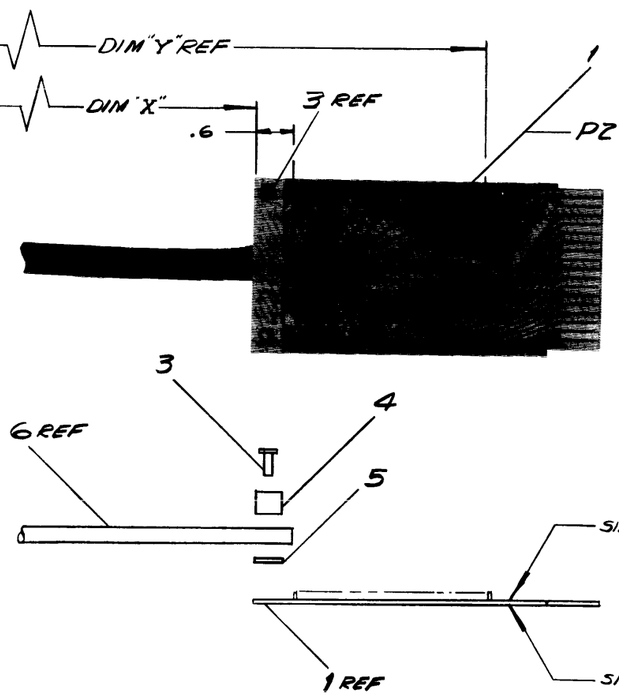
NUMBER	DIM "X" VARIATION	DIM "Y" (PRECUT) REF
7008417-25	25" ± 3"	25' 7"

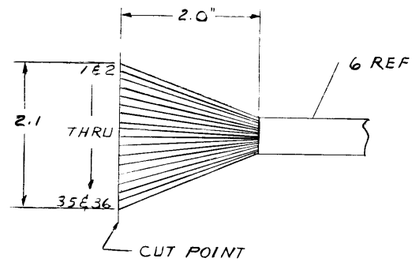
NOTES:
1. BERG # HTGG-TOOL FOR CRIMPING PINS.
2. MANUFACTURING SHOULD USE MACHINE CRIMPER
3. FOR INFORMATION ON BERG PINS REFER TO SPEC # 12-10089-0-0.



VIEW A-A
SCALE: NONE







CUT POINT VIEW
SCALE: 1/1

ITEM NO.	QTY.	DESCRIPTION	PART NO.
7	36	CRIMP SOCKET BERG 47784	1210089-5
6	1	CABLE 36 COND.	9107700
5	AR	TAPE #33 1/2 W. 3M CO.	9007834
4	1	CLAMP, CABLE	1202790
3	2	EYELET A-94 STIMP	9006741
2	1	HOUSING # 20389 BERG	1210090-0
1	1	MODULE BD. M984	M984

PARTS LIST

FIRST USED ON OPTION/MODEL: LC11

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓
MATERIAL —
FINISH —

		DATE
DRN		5-26-71
CHK		5/28/71
ENG	Beatty	6/1/71
PROJ ENG		6/2/71
PROD	Straigis	6/7/71

NEXT HIGHER ASSY. A-PL-LC11-0-0

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: INTERFACE CABLE (LC11)

SIZE D | CODE IA | NUMBER 7008417-0-0 | REV. A

SCALE —

SHEET 1 OF 1

DIST. G

REVISIONS			
REV	CHANGE NO	CHK	
A	LC11-00001		Mohankumar 2-19-71 BEATTY J Beatty

DEC FORM NO DRD 100-A

SIZE D | CODE IA | NUMBER 7008417-0-0 | REV. A

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 6/21/71

TITLE LC8-E (M8329)

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE

ENG	APPD	SIZE	CODE	NUMBER	REV
John Kirk	John Kirk	A	SP	LC8-E-1	

DEC FORM NO. DRA 107

Abstract:

The LC8-E is a parallel interface to the LA30 DECwriter for the PDP8/E. The LC8-E has split lugs provided to allow the device codes to be changed.

I. General

The LC8-E parallel interface is used with the LA30 DECwriter. Split lugs are provided to allow any device code between 00_8 and 77_8 to be assigned. In this manner multiple units can be installed to allow several LA30's on a single PDP8/E.

The instruction set is identical to the teletype keyboard/ teleprinter instruction set with the following exceptions:

1. There is no paper tape reader, hence no reader run.

2. There is no paper tape punch.

3. The maximum input/output rate is 30 characters/second.

4. Output to the printer is only 7 bits (AC5-11). Eight bits can be sent but bit 8 (AC4) is ignored.

5. If a non-printing character is sent to the printer, the printer does not go through a normal print cycle, but indicates that it is ready to print again in approximately 1 to 2 usec.

6. The LA30 has no hardware TAB, FORM FEED or VERTICAL TAB features.

7. Carriage return takes several character times but the printer ready flag is set again ~2 us after a CAR RET instruction. When the next character is sent, however, printer ready flag is not set again until the CAR RET has finished and this next character has been printed.

8. It is possible, by changing an internal switch, for the keyboard to generate lower case characters. Normally this is set so that only upper case characters are generated whether the keyboard is in SHIFT or not.

9. The printer cannot print lower case characters. These are interpreted as upper case.

10. There is no BELL; CNTRL G is treated as non-printing.

11. End of line (> 80 characters) is trapped and any subsequent characters sent before a CAR RET are not printed.

II. Physical

The LC8-E is built on a single quad size board which plugs directly into the OMNIBUS. The etched board number is M8329.

III. Specifications - Environment

Operating temperature: 0 to 55 degrees C
Operating humidity: 10 to 90% non-condensing
During storage, temperature extremes of -15 to +65 degrees C can be tolerated.

IV. Specifications - Operating

A. Type of transmission: Parallel
Type of Reception: Parallel

B. Control Signals:

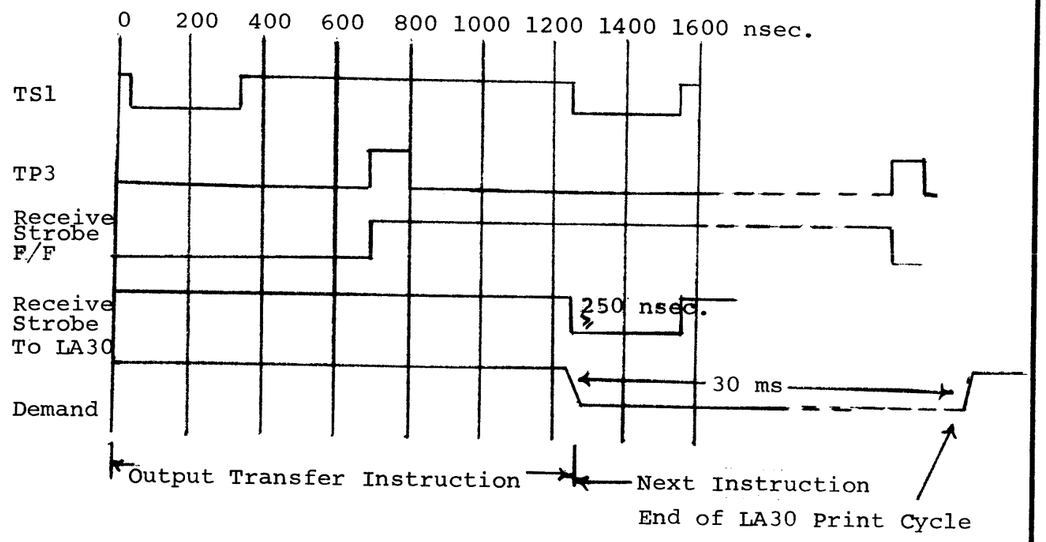
1. Receiver Strobe: Sent to the LA30 teleprinter to enable the printing of a character. It is sent at Time State One (TS1) of the instruction following the Input/Output transfer instruction. See the timing diagram in part D of this section.

2. Demand: Received from the LA30 printer requesting the next character from the PDP8/E. See the timing diagram in part D of this section.

3. Transmitter Strobe: Received from the LA30 keyboard; used to clock the character into the input buffer.

C. Number of Data Elements per character: Seven.

D. Timing Diagram:



E. Cable

The standard cable length is 25 feet. The cable used is a DEC #7008417.

V. Programming

The LC8-E uses the standard PDP8/E teletype keyboard/teletype teleprinter instruction set with the following changes:

LA30 Keyboard Instructions

*6XXØ	KCF	Clear Keyboard Flag Clears the keyboard flag only
6XX1	KSF	Skip on Keyboard Flag Skip next sequential instruction if keyboard flag is set.

6XX2	KCC	Clear Keyboard Flag Clear the keyboard flag and the AC only.
6XX4	KRS	Read Keyboard Buffer Static OR's the contents of the input buffer with AC5 through 11 and leaves the result in AC5-11. AC4 is set. Neither the AC nor the keyboard flag is cleared.
**6XX5	KIE	Set/Clear Interrupt Enable Set or clear the interrupt enable flip-flop as determined by AC11.
6XX6	KRB	Read Keyboard Buffer Clear the keyboard flag and the AC. Transfer the contents of the input buffer to AC5 through AC11. Set AC4.

LA30 Teleprinter Instructions

6YYØ	TFL	Set Teleprinter Flag Set the teleprinter flag
6YY1	TSF	Skip on Teleprinter Flag Skip the next sequential instruction if the teleprinter flag is set.
*6YY2	TCF	Clear Teleprinter Flag Clears the teleprinter flag.
6YY4	TPC	Load Teleprinter Buffer and Print Transfer AC bits 5 through 11 to the output buffer and set Receiver Strobe. At Time State One (TS1) of the following instruction, the character is transferred to the LA30 teleprinter. The teleprinter flag is not cleared.
6YY5	SPI	Skip if Teletype Interrupt Skip next sequential instruction if keyboard or teleprinter flag is set and Interrupt Enable is set.

6YY6	TLS	Load Teleprinter Sequence The teleprinter flag is cleared and AC bits 5 through 11 are transferred to the output buffer. Receiver Strobe is set. At Time State One (TS1) of the following instruction, the character is transferred to the LA30 teleprinter. With the previous instruction the return of the signal DEMAND from the LA30 sets the teleprinter flag enabling the transfer of the next character. In the instructions XX and YY are the device code. The standard codes are 03_8 and 04_8 for the LA30 keyboard/teleprinter respectively. These can be changed to allow several LA30's to be installed on one PDP8/E.

* Cleared by initialize or CAF
** Set by initialize or CAF

VI Device Codes

All input/output devices on the PDP8/E have device codes which must be unique to that device. No two devices can have the same device codes. An example is 6036 where 03 would be the device code.

On the LC8-E, split lugs are provided so that any device codes between 00_8 and 77_8 can be selected separately as the transmitter and receiver device codes. Since some of these codes may be pre-assigned to other devices, a careful check should be made before any device codes are assigned.

Across the bottom edge of the M8329 are three groups of four split lugs. These determine the device codes. Each group of split lugs has an alphabetic designation (A-F), and each lug within a group is numbered (1-4). A model layout is shown below.

2		1
W2	A	W1
4		3

Machine inserted jumpers, W1 to W12, are the factory wired

device codes 03 and 04 for the RECEIVER and TRANSMITTER respectively. REMEMBER to cut these jumpers before adding any jumpers to change device codes.

The strappings for RECEIVER device codes are given in the following list.

Code	Group A	Group B	Group C	Group D	Group E	Group F
00	1-3	1-3	1-3	3-4	4-2	4-2
01	1-3	1-3	1-3	3-4	4-2	1-2
02	1-3	1-3	1-3	3-4	1-2	4-2
03	1-3	1-3	1-3	3-4	1-2	1-2
04	1-3	1-3	1-3	1-4	4-2	4-2
05	1-3	1-3	1-3	1-4	4-2	1-2
06	1-3	1-3	1-3	1-4	1-2	4-2
07	1-3	1-3	1-3	1-4	1-2	1-2
10	1-3	1-3	4-3	3-4	4-2	4-2
11	1-3	1-3	4-3	3-4	4-2	1-2
12	1-3	1-3	4-3	3-4	1-2	4-2
13	1-3	1-3	4-3	3-4	1-2	1-2
14	1-3	1-3	4-3	1-4	4-2	4-2
15	1-3	1-3	4-3	1-4	4-2	1-2
16	1-3	1-3	4-3	1-4	1-2	4-2
17	1-3	1-3	4-3	1-4	1-2	1-2
20	1-3	4-3	1-3	3-4	4-2	4-2
21	1-3	4-3	1-3	3-4	4-2	1-2
22	1-3	4-3	1-3	3-4	1-2	4-2
23	1-3	4-3	1-3	3-4	1-2	1-2
24	1-3	4-3	1-3	1-4	4-2	4-2
25	1-3	4-3	1-3	1-4	4-2	1-2
26	1-3	4-3	1-3	1-4	1-2	4-2
27	1-3	4-3	1-3	1-4	1-2	1-2
30	1-3	4-3	4-3	3-4	4-2	4-2
31	1-3	4-3	4-3	3-4	4-2	1-2
32	1-3	4-3	4-3	3-4	1-2	4-2
33	1-3	4-3	4-3	3-4	1-2	1-2
34	1-3	4-3	4-3	1-4	4-2	4-2
35	1-3	4-3	4-3	1-4	4-2	1-2

Code	Group A	Group B	Group C	Group D	Group E	Group F
36	1-3	4-3	4-3	1-4	1-2	4-2
37	1-3	4-3	4-3	1-4	1-2	1-2
40	4-3	1-3	1-3	3-4	4-2	4-2
41	4-3	1-3	1-3	3-4	4-2	1-2
42	4-3	1-3	1-3	3-4	1-2	4-2
43	4-3	1-3	1-3	3-4	1-2	1-2
44	4-3	1-3	1-3	1-4	4-2	4-2
45	4-3	1-3	1-3	1-4	4-2	1-2
46	4-3	1-3	1-3	1-4	1-2	4-2
47	4-3	1-3	1-3	1-4	1-2	1-2
50	4-3	1-3	4-3	3-4	4-2	4-2
51	4-3	1-3	4-3	3-4	4-2	1-2
52	4-3	1-3	4-3	3-4	1-2	4-2
53	4-3	1-3	4-3	3-4	1-2	1-2
54	4-3	1-3	4-3	1-4	4-2	4-2
55	4-3	1-3	4-3	1-4	4-2	1-2
56	4-3	1-3	4-3	1-4	1-2	4-2
57	4-3	1-3	4-3	1-4	1-2	1-2
60	4-3	4-3	1-3	3-4	4-2	4-2
61	4-3	4-3	1-3	3-4	4-2	1-2
62	4-3	4-3	1-3	3-4	1-2	4-2
63	4-3	4-3	1-3	3-4	1-2	1-2
64	4-3	4-3	1-3	1-4	4-2	4-2
65	4-3	4-3	1-3	1-4	4-2	1-2
66	4-3	4-3	1-3	1-4	1-2	4-2
67	4-3	4-3	1-3	1-4	1-2	1-2
70	4-3	4-3	4-3	3-4	4-2	4-2
71	4-3	4-3	4-3	3-4	4-2	1-2
72	4-3	4-3	4-3	3-4	1-2	4-2
73	4-3	4-3	4-3	3-4	1-2	1-2
74	4-3	4-3	4-3	1-4	4-2	4-2
75	4-3	4-3	4-3	1-4	4-2	1-2
76	4-3	4-3	4-3	1-4	1-2	4-2
77	4-3	4-3	4-3	1-4	1-2	1-2

The strappings for TRANSMITTER device codes are given in the following list.

Code	Group A	Group B	Group C	Group D	Group E	Group F
00	1-2	1-2	1-2	3-2	4-3	4-3
01	1-2	1-2	1-2	3-2	4-3	1-3
02	1-2	1-2	1-2	3-2	1-3	4-3
03	1-2	1-2	1-2	3-2	1-3	1-3
04	1-2	1-2	1-2	1-2	4-3	4-3
05	1-2	1-2	1-2	1-2	4-3	1-3
06	1-2	1-2	1-2	1-2	1-3	4-3
07	1-2	1-2	1-2	1-2	1-3	1-3
10	1-2	1-2	4-2	3-2	4-3	4-3
11	1-2	1-2	4-2	3-2	4-3	1-3
12	1-2	1-2	4-2	3-2	1-3	4-3
13	1-2	1-2	4-2	3-2	1-3	1-3
14	1-2	1-2	4-2	1-2	4-3	4-3
15	1-2	1-2	4-2	1-2	4-3	1-3
16	1-2	1-2	4-2	1-2	1-3	4-3
17	1-2	1-2	4-2	1-2	1-3	1-3
20	1-2	4-2	1-2	3-2	4-3	4-3
21	1-2	4-2	1-2	3-2	4-3	1-3
22	1-2	4-2	1-2	3-2	1-3	4-3
23	1-2	4-2	1-2	3-2	1-3	1-3
24	1-2	4-2	1-2	1-2	4-3	4-3
25	1-2	4-2	1-2	1-2	4-3	1-3
26	1-2	4-2	1-2	1-2	1-3	4-3
27	1-2	4-2	1-2	1-2	1-3	1-3
30	1-2	4-2	4-2	3-2	4-3	4-3
31	1-2	4-2	4-2	3-2	4-3	1-3
32	1-2	4-2	4-2	3-2	1-3	4-3
33	1-2	4-2	4-2	3-2	1-3	1-3
34	1-2	4-2	4-2	1-2	4-3	4-3
35	1-2	4-2	4-2	1-2	4-3	1-3
36	1-2	4-2	4-2	1-2	1-3	4-3
37	1-2	4-2	4-2	1-2	1-3	1-3

Code	Group A	Group B	Group C	Group D	Group E	Group F
40	4-2	1-2	1-2	3-2	4-3	4-3
41	4-2	1-2	1-2	3-2	4-3	1-3
42	4-2	1-2	1-2	3-2	1-3	4-3
43	4-2	1-2	1-2	3-2	1-3	1-3
44	4-2	1-2	1-2	1-2	4-3	4-3
45	4-2	1-2	1-2	1-2	4-3	1-3
46	4-2	1-2	1-2	1-2	1-3	4-3
47	4-2	1-2	1-2	1-2	1-3	1-3
50	4-2	1-2	4-2	3-2	4-3	4-3
51	4-2	1-2	4-2	3-2	4-3	1-3
52	4-2	1-2	4-2	3-2	1-3	4-3
53	4-2	1-2	4-2	3-2	1-3	1-3
54	4-2	1-2	4-2	1-2	4-3	4-3
55	4-2	1-2	4-2	1-2	4-3	1-3
56	4-2	1-2	4-2	1-2	1-3	4-3
57	4-2	1-2	4-2	1-2	1-3	1-3
60	4-2	4-2	1-2	3-2	4-3	4-3
61	4-2	4-2	1-2	3-2	4-3	1-3
62	4-2	4-2	1-2	3-2	1-3	4-3
63	4-2	4-2	1-2	3-2	1-3	1-2
64	4-2	4-2	1-2	1-2	4-3	4-3
65	4-2	4-2	1-2	1-2	4-3	1-3
66	4-2	4-2	1-2	1-2	1-3	4-3
67	4-2	4-2	1-2	1-2	1-3	1-3
70	4-2	4-2	4-2	3-2	4-3	4-3
71	4-2	4-2	4-2	3-2	4-3	1-3
72	4-2	4-2	4-2	3-2	1-3	4-3
73	4-2	4-2	4-2	3-2	1-3	1-3
74	4-2	4-2	4-2	1-2	4-3	4-3
75	4-2	4-2	4-2	1-2	4-3	1-3
76	4-2	4-2	4-2	1-2	1-3	4-3
77	4-2	4-2	4-2	1-2	1-3	1-3

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ACCESSORY LIST

MADE BY R. Allen DATE 4/19/72	CHECKED DATE 4/19/72	SECTION
ENG DATE 4/19/72	PROD DATE 4/19/72	ISSUED SECT.

LEGEND

D DOCUMENT
DN DOCUMENT CHANGE NOTICE
PA PAPER TAPE ASCII
PB PAPER TAPE BINARY
PM PAPER TAPE READ-IN-MODE

ITEM NO.	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION LC8-E	LC8-L	KIT CHECK BY ____ DATE ____	INSTALLATION CHECK BY ____ DATE ____
1	M8329	Interface Module	1	-		
2	7008417	Interface Cable	1	-		
3	M7718	Interface Module	-	1		
4	M7719	Interface Module	-	1		
5	7008514	Interface Cable	-	1		
6	LIBKIT-8E-LC8E	Software Kit	1	1		
7	A-ML-LC8-0	Print Set	1	1		
8	Dec-8E-HR3B-D-LC8-E	Maintenance Manual	1	-		
9	A-SP-LC8-L-1	Engineering Specification	-	1		
		If maintenance manual is not available ship engineering spec. instead				

TITLE	ASSY. NO.	SIZE	CODE	NUMBER	REV.	ECO NO
Accessory Shipping List	SHEET 1 OF 1	A	AL	LC8-0-1		
		DIST.				

DEC 16-(325)-1075-N172 DRA 121