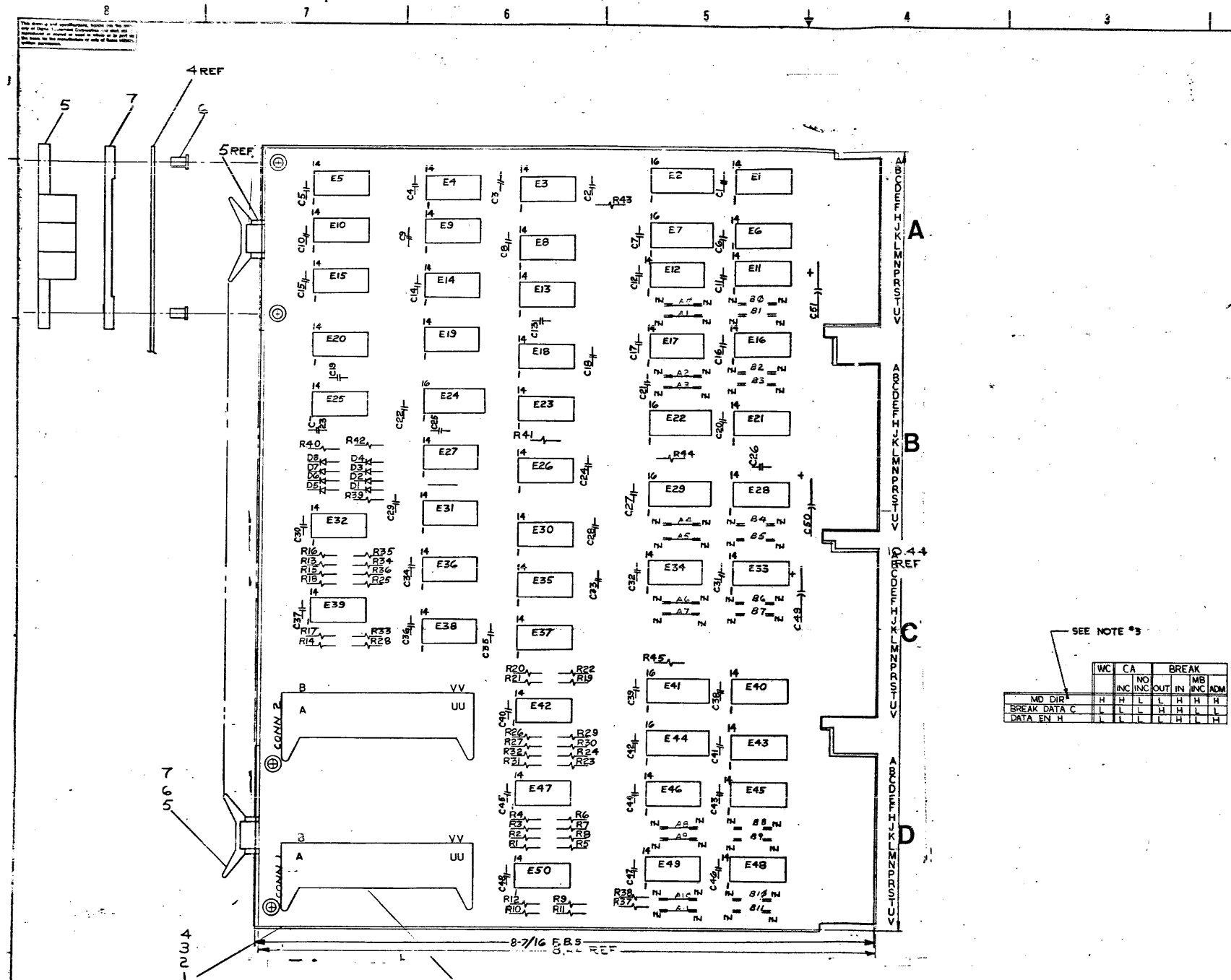


KD8-E
data break interface
engineering drawings



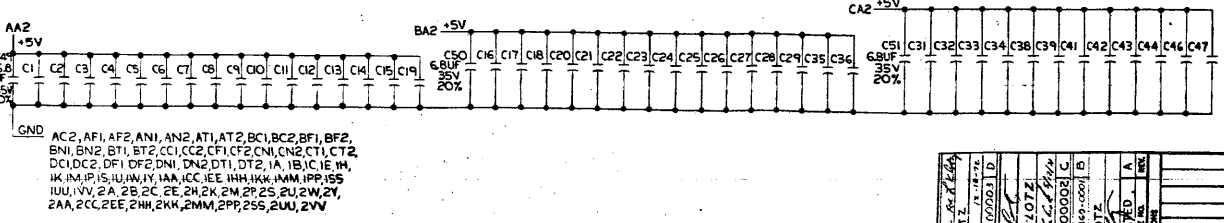
- NOTES:
- UNLESS OTHERWISE NOTED:
CAPACITORS ARE .01UF, 100V, 20%
DIODES ARE D6G2
RESISTORS ARE 220, 1/4W, 5%
I.C.'S ARE DEC 97401
 - ALL 'A' JUMPERS ARE INSTALLED AT MANUFACTURING. TO ESTABLISH HIGHER PRIORITIES REMOVE AN 'A' JUMPER AND INSTALL A 'B' JUMPER. B0 IS HIGHEST PRIORITY WHILE B11 IS LOWEST PRIORITY.
 - MD DR IS LOW FOR EVERY MEMORY READ. THIS LEVEL IS TRUE DURING WRITE.

SEE NOTE #3

	WC		CA		BREAK	
	INC	OUT	INC	OUT	INC	ADM
MD DIR	H	H	L	H	H	H
BREAK DATA C	L	L	L	H	L	L
DATA EN H	L	L	L	L	H	H

DEC 2501	+5V	14	NONE
DEC 6314		1	8
IC 384		1	8
DEC 6380		1	8
I.C. TYPE	GND	+5V	SEE NOTE #2

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



GND AC2, AF1, AF2, AN1, AN2, AT1, AT2, BC1, BC2, BF1, BF2, BN1, BN2, BT1, BT2, CC1, CC2, CF1, CF2, CN1, CN2, CT1, CT2, DC1, DC2, DF1, DF2, DN1, DN2, DT1, DT2, IA, IB, IC, IE, IH, IK, IM, IP, IS, IU, IV, IW, IX, IY, IAA, IAC, IEE, IHH, IJK, IMM, IPP, ISS, IUV, IVV, ZA, ZB, ZC, ZE, ZH, ZK, ZM, ZP, ZS, ZU, ZV, ZY, ZAA, ZCC, ZEE, ZHH, ZKK, ZMM, ZPP, ZSS, ZUU, ZVV

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	REV.
4	E1, E2, E3, E4, E10	I.C. DEC 8881	1909705	31
1	E5	WMRE #22 ANG SOLID BUS	9107560-01	30
2	E3, E8	DIODE PACK 7412	1910010	29
3	E7, E29, E44	I.C. 8256	1909455	28
2	E25, E27	I.C. 7416	1909434	27
4	E16, E48, E23, E33	I.C. DEC 97401	1909973	25
2	E12, E46	I.C. DEC 6314	1909972	24
3	E11, E19, E45	I.C. 7404	1909686	23
5	E4, E9, E31, E36, E38	I.C. 74H74	1909667	22
4	E2, E22, E24, E41	I.C. 8271	1909615	21
1	E30	I.C. 384	1909486	20
7	E6, E17, E28, E34, E35, E43, E49	I.C. DEC 6380	1909971	19
1	E13	I.C. 74H11	1909267	18
1	E14	I.C. 74H10	1909057	17
3	E10, E20, E26	I.C. 7402	1909004	16
1	E5	I.C. 7440	1905679	15
2	E15, E18	I.C. 7400	1905575	14
45	R1 - R45	RES. 220, 1/4W, 5%	1900271	13
8	D1 - D8	DIODE D6G2	1100015	12
43	C1 - C48	CAP. 0.01UF, 100V, 20% DISC	10000610	11
3	C49 - C51	CAP. 6.8UF, 35V, 20% S. TANT	1000067	10
1	A	RIGHT ANGLE HEADER 40 PIN	1200941	9
1	B	SPLIT LUG	14006735	8
4	C	SPACER (CABLE CLAMP)	1205704	7
1	D	EYELET G54-11 STIMPSON	9004750	6
1	E	HANDLE FLIP CHIP - MAGENTA	900837.06	5
1	F	ETCHED CIRCUIT BOARD	9009447	4
REF		MODULE HISTORY LIST	8-MH-8556-8-6	3
REF		ASSY/DRILLING HOLE LAYOUT	2-MH-8556-25	2
REF		X-Y COORDINATE HOLE LOC.	X-CO-2560-2-1	1

ETCH BOARD REV	B	DATE	BY	APP'D	EQUIPMENT CORPORATION
DATA BREAK INTERFACE					
DEC NO.	EIA NO.	DG62	IN 645	A-M-KCB-E	REV. 0-1
SEMICONDUCTOR CONVERSION CHART					
SHEET 2 OF 3					

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**DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS**

ENGINEERING SPECIFICATION

DATE 4/21/71

TITLE KD8-E DATA BREAK MULTIPLEXER

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE

ENG Louis Klotz	APPD <i>Renzo Vogelsang</i>	SIZE A	CODE SP	NUMBER KD8-E-1	REV
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ENGINEERING SPECIFICATION

digital

CONTINUATION SHEET

TITLE KD8-E DATA BREAK MULTIPLEXER

1.Ø Overall Description

The KD8-E option is used with the KA8-E and converts the "Omnibus" to a PDP8/I or 8/L Positive Data Break Bus either three cycle or single cycle break. It also provides for multiplexing of up to twelve (12) KD8-E options in a single PDP8/E; therefore, removing the need for External Multiplexers such as the DMØ1 or DMØ4.

Due to timing considerations in the PDP8/E, the DMØ1 or DMØ4 Break Multiplexers may not be used with the KD8/E.

The 1971 edition of the Small Computer Handbook represents part of this specification and should be referred to.

2.Ø General Description

2.1 Definition of Basic System

- A. One M836Ø Data Break Board
- B. Two BCØ8J Cables

2.2 List of Included Options

2.3 Mechanical Packaging

- A. 8½" by 10½" quad board
- B. Two cable connectors

2.4 Environmental Specification

- A. Temperature: 32° to 130°F (0° to 55°C)
- B. Humidity: Maximum 90% Rel. No condensation
- C. Power: +5 @ 1.43 amp.

2.5 General Performance Specification

Refer to 1971 Small Computer Handbook.

3.Ø Specification of Vendor Supplied Equipment

Refer to Purchase Specification for component in question.

		SIZE A	CODE SP	NUMBER KD8-E-1	REV
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ENGINEERING SPECIFICATION

digital

CONTINUATION SHEET

TITLE KDS-E DATA BREAK MULTIPLEXER

4.Ø Programming

A. Non-programmable.

5.Ø Interface Specifications

Refer to 1971 Small Computer Handbook.

SIZE
A

CODE
SP

NUMBER
KDS-E-1

REV

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DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 10/13/71

TITLE KD8-E TEST PROCEDURE

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	ECO CHANGE	00005	KLOTZ	4-72	RK	4-25-72

ENG <i>Long</i>	APPD <i>RK</i>	SIZE A	CODE SP	NUMBER KD8-E-2	REV A
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ENGINEERING SPECIFICATION



CONTINUATION SHEET

TITLE KD8-E TEST PROCEDURE

- 1.0 EQUIPMENT
 - 1.1 PDP8E
 - 1.2 Daughter station on PDP8E test line
 - 1.3 453 Scope/voltage probes

- 2.0 TEST STATION SET UP
 - 2.1 Check paperwork in envelop making sure it is complete as required by DEC Standard # 101.
 - 2.1.1 Test and inspection record
 - 2.1.2 Key sheet and ECO status sheet will contain both CS and etch revision.
 - 2.1.3 Quality control inspection report.
 - 2.1.4 PDP8E progress report
 - 2.2 Insert the M8360 to be tested in the Omnibus per "Recommended Module Assignment List" (A-SP-PDP8E-0-4)
 - 2.3 Cable connections

<u>M8360</u>	<u>Daughter Station</u>
Conn 1	C8 - D8
Conn 2	C7 - D7

- 3.0 TESTING
 - 3.1 Run a quick verify off daughter station

- 4.0 FINAL OPERATION AND INSPECTION
 - 4.1 Remove M8360
 - 4.2 Disconnect cables
 - 4.3 Check that the following paperwork has been completed
 - ECO status sheet
 - QC sheet
 - 8/E progress report

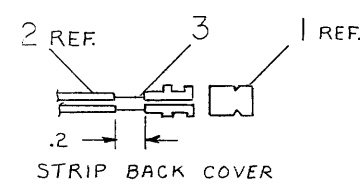
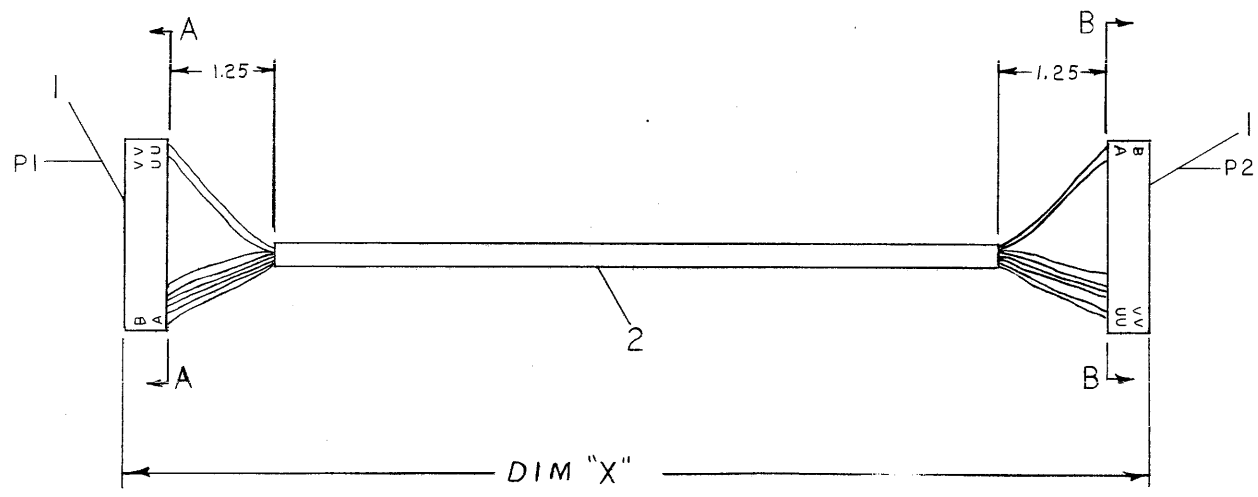
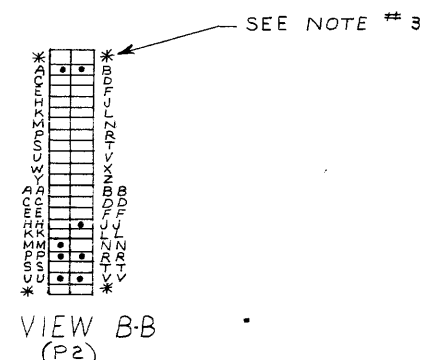
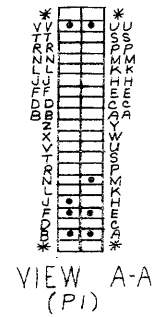
- 5.0 EXCEPTIONS
 - 5.1 If daughter station is not available, but KD8E tester is, the above steps 1.0 to 3.0 will not be performed. Instead the KD8E will be hooked up and 3 passes of the latest KD8E diagnostic will be run (Refer to D-CS-KD8E-T-1).

SIZE A	CODE SP	NUMBER KD8-E-2	REV A
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WIRE TABLE							LEGEND	
ITEM NO.	DESCRIPTION	FROM	TO	CONNECTION	REMARKS	NUMBER	VARIATION	
2	BLU	P1-A	P2-VV	3	CRIMP	BC08T-1A	1 FT. 1 IN. ± 1 IN.	
	ORN	P1-B	P2-UU					
	BRN	P1-E	P2-RR					
	RED	P1-F	P2-PP					
	VIO	P1-J	P2-MM					
	BLK	P1-M	P2-JJ					
	GRY	P1-UU	P2-B					
2	GRN	P1-VV	P2-A	3	CRIMP			

- NOTES:
1. MANUFACTURER'S SPECIFIED MACHINE CRIMPING TOOL FOR THE ASSY OF PINS (ITEM #3).
 2. PINS (ITEM #3) SHOULD BE CRIMPED USING ELEC HAND TOOL (367515-5) OR THE EQUIVALENT.
 3. * ASTERISKS INDICATES CAVITIES NOT USED OR DESIGNATED BY LETTERS.
 4. BERG CONNECTORS WILL BE LABELLED BC08T P1 AND BC08T P2 ON THE BACK SIDE OF THE RESPECTIVE CONNECTOR.



CHK	CHANGE NO.	REV
	BC08T-00001	A
	4/18/72	
B. SMITH		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	REV.
PDP-8E				
	16	SOCKET PIN 48015 BERG	1210089-6	3
	4/R	10 COND. CABLE	917623	2
	2	HOUSING BERG #20383	1210090-0	1

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DATE		PARTS LIST
DECIMALS	ANGLES	DRN	DATE	
.XXX = .005	±0° 30'	WILSON	3/27/72	 TITLE CABLE MODEM INTERCONNECTING
.XX = .02		CHK	DATE	
.X = .1		ENG	DATE	
		PROJ. ENG.	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD.	DATE	
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SCALE	OF	

REV A 1210089-6