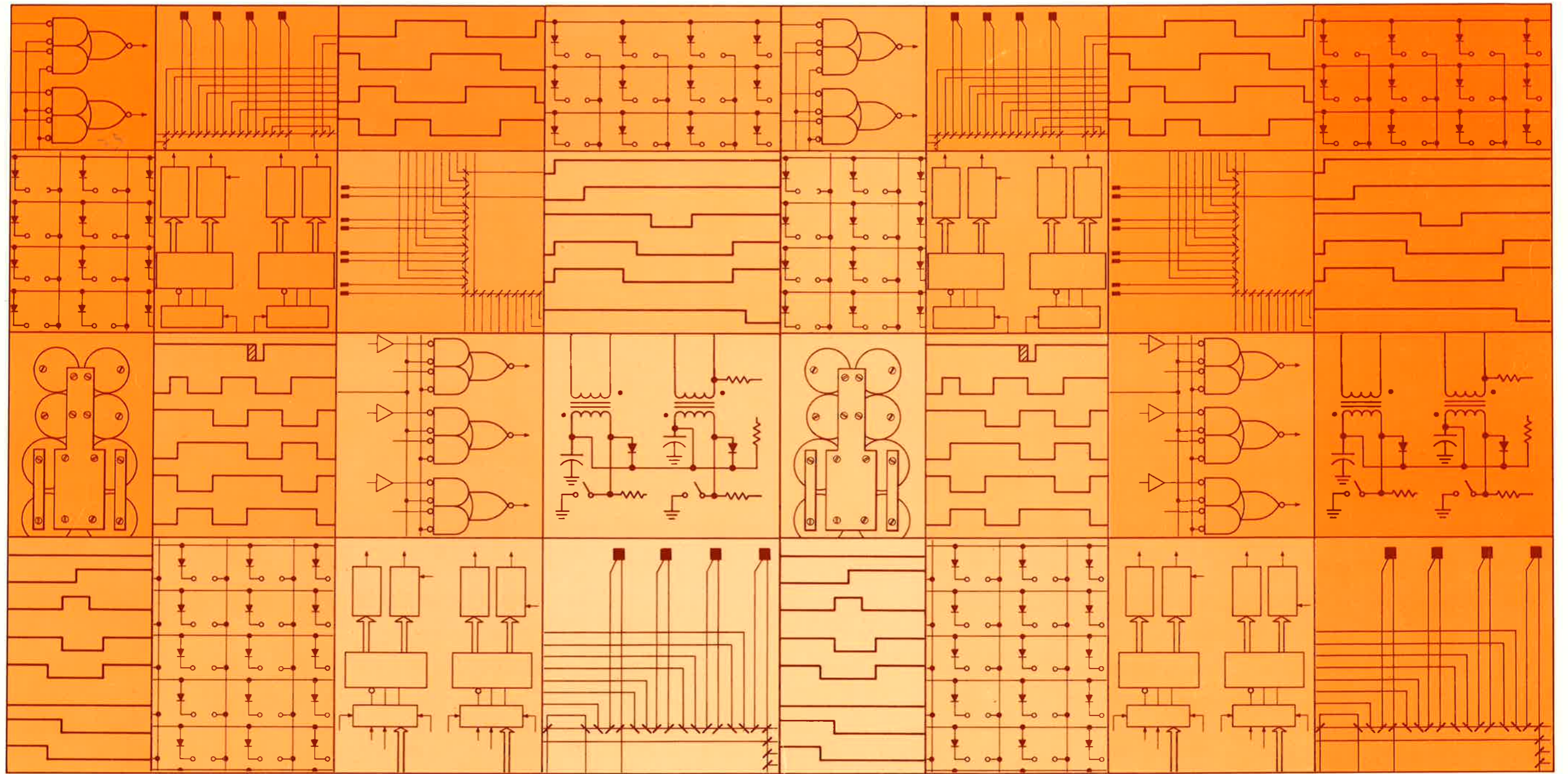


pdp8/e

pdp8/f & pdp8/m



digital

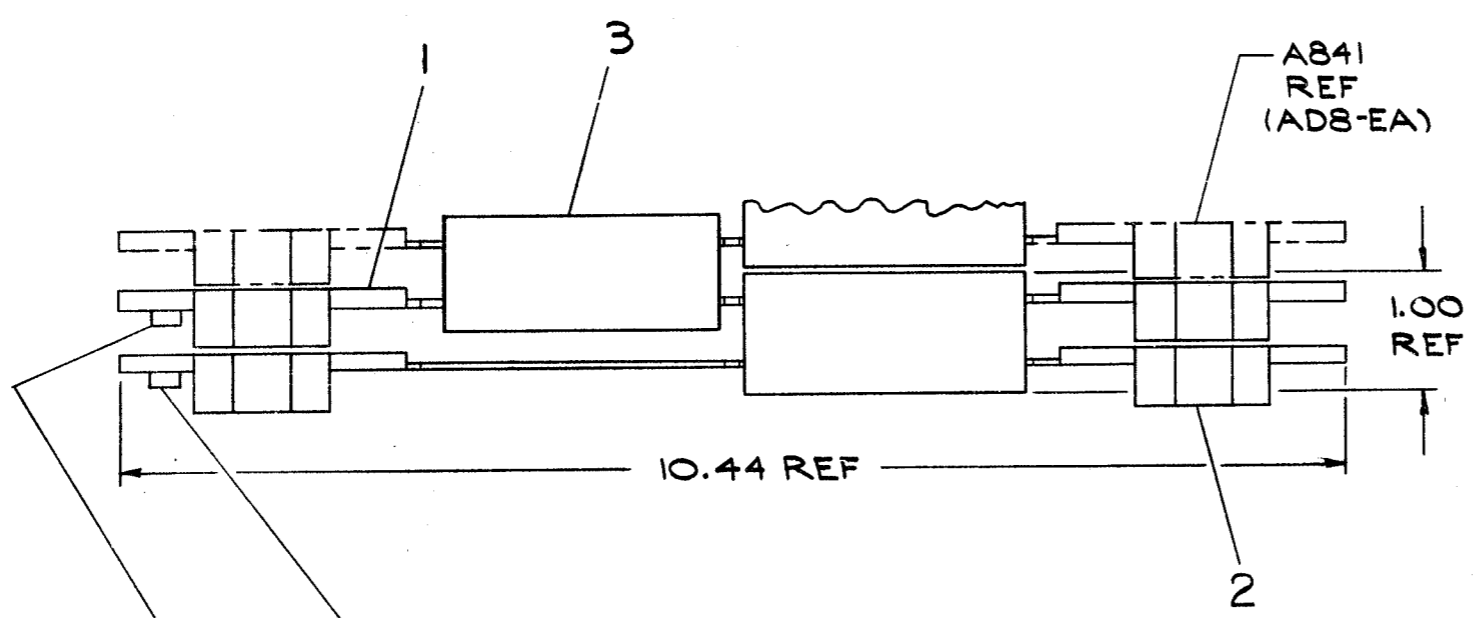
**VC8-E point-plot
display control
engineering drawings**

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NOTES:

1. ITEM NO.1 AND ITEM NO.2, MUST ALWAYS BE FACING FRONT OF MACHINE AS SHOWN.
2. NO CONNECTION WHEN AD8-EA IS USED.
3. BC01K - VR14 OR VR20 OPTION
BC01L - USED WITH TEKTRONIX 602 OR EQUIVALENT.
7008499 - USERSPECIFIED SCOPE.
7008491 - RM503 SCOPE.
7008977 - 611 STORAGE SCOPE CABLE

D
C
B
A



USED WITH ANALOG POWER CABLE ASSY. 7008375 REF SEE NOTE #2

USED WITH BC01K, BC01L, 7008499, 7008491, 7008977 REF (SEE NOTE 3)

A

REV.	CHANGE NO.	REV.
A	VC8E-00001	11-3-71
B	VC8E-00002	1-25-72

A WALLACK
A. TOWN
BUDIAN SKY
A.C.F. 9-12-72

DEC FORM NO. DRC 100

4

3

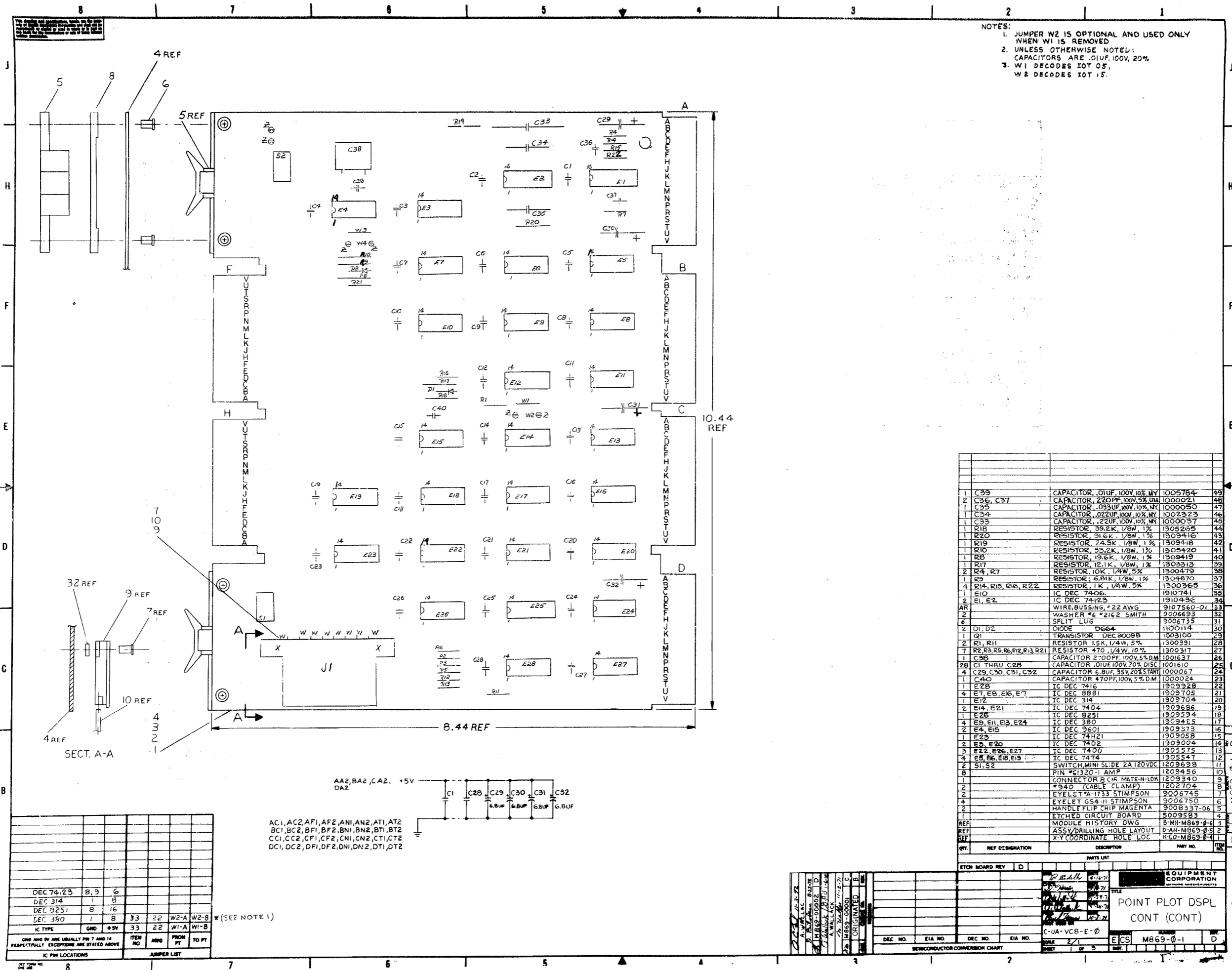
2

1

REV. B
NUMBER VC8-E-0
SIZE CODE CUA

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
LAB8-E				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED		DRN. <i>D. Ferguson</i>	DATE 4-8-71	 digital EQUIPMENT CORPORATION <small>MAYNARD, MASSACHUSETTS</small>
UNLESS OTHERWISE SPECIFIED		CHK'D. <i>D. Cable</i>	DATE 4-28-71	
DIMENSION IN INCHES		ENG. <i>D. Cable</i>	DATE 4-28-71	
TOLERANCES		PRD. ENG. <i>A. DeWinsky</i>	DATE 4-28-71	
DECIMALS ± .005		FRACCTIONS ± 1/64	ANGLES ± 0°30'	
MATERIAL		PROD. <i>W. H. Hesse</i>	DATE 4-29-71	TITLE
+		NEXT HIGHER ASSY.		DISPLAY CONTROL
+		A-PL-LAB8-E-0		VC8-E
FINISH		SCALE 1/1	SHEET 1 OF 1	SIZE CODE CUA
				NUMBER VC8-E-0
				REV. B
				DIST. =

A



NOTES:
 1. JUMPER W2 IS OPTIONAL AND USED ONLY WHEN W1 IS REMOVED
 2. UNLESS OTHERWISE NOTED: CAPACITORS ARE .01UF, 100V, 20%
 3. W1 DECODES TOT 05, W2 DECODES TOT 15.

4 REF

5 REF

32 REF

9 REF

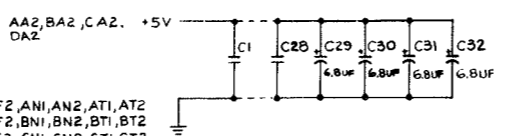
7 REF

10 REF

SECT. A-A

8.44 REF

10.44 REF



AC1, 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

IC PART NO.	QTY	REV	LOC	REF	DESCRIPTION
DEC 74-23	8	3	6		
DEC 314	1	8			
DEC 8251	8	16			
DEC 380	1	8			
IC TYPE	GND	+5V			
	33	22	W2-A	W2-B	
	33	22	W1-A	W1-B	

IC PIN LOCATIONS

ITEM NO	ANG	FROM PT	TO PT

JUMPER LIST

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	C33	CAPACITOR .01UF, 100V, 10%, NY	1005784	49
2	C36, C37	CAPACITOR, 220PF, 100V, 5%, DM	1000021	48
1	C35	CAPACITOR, .033UF, 100V, 10%, NY	1000050	47
1	C34	CAPACITOR, .022UF, 100V, 10%, NY	1002323	46
1	C33	CAPACITOR, .22UF, 100V, 10%, NY	1000037	45
1	R18	RESISTOR, 33.2K, 1/8W, 1%	1305255	44
1	R20	RESISTOR, 31.6K, 1/8W, 1%	1309416	43
1	R19	RESISTOR, 24.3K, 1/8W, 1%	1309418	42
1	R10	RESISTOR, 33.2K, 1/8W, 1%	1305420	41
1	R8	RESISTOR, 19.6K, 1/8W, 1%	1309419	40
1	R17	RESISTOR, 12.1K, 1/8W, 1%	1303313	39
2	R4, R7	RESISTOR, 10K, 1/4W, 5%	1300479	38
1	R9	RESISTOR, 6.81K, 1/8W, 1%	1304870	37
4	E14, E15, E16, R22	RESISTOR, 1K, 1/4W, 5%	1300368	36
1	E1	IC DEC 7406	1910741	35
2	E1, E2	IC DEC 74123	1910436	34
AR		WIRE, BUSSING, #22 AWG	9107560-01	33
2		WASHER #6 #2162 SMITH	9006693	32
6		SPLIT LUG	9006735	31
2	D1, D2	DIODE D664	1100114	30
2	R1, R11	TRANSISTOR DEC 3009B	1303100	29
7	R2, R3, R5, R6, R12, R13, R21	RESISTOR 1.5K, 1/4W, 5%	1300391	28
1	C38	RESISTOR 470, 1/4W, 10%	1300317	27
1	C38	CAPACITOR 2700PF, 120V, 5%, DM	1001637	26
28	C1 THRU C28	CAPACITOR .01UF, 100V, 20%, DISC	1001610	25
4	C29, C30, C31, C32	CAPACITOR 6.8UF, 35V, 20% TANT	1000067	24
1	C40	CAPACITOR 470PF, 100V, 5%, DM	1000024	23
1	E28	IC DEC 7416	1909928	22
4	E7, E8, E6, E7	IC DEC 8881	1909705	21
1	E12	IC DEC 314	1909704	20
2	E14, E21	IC DEC 7404	1909686	19
1	E25	IC DEC 8251	1909594	18
4	E9, E11, E13, E24	IC DEC 380	1303465	17
2	E4, E15	IC DEC 9601	1909373	16
1	E23	IC DEC 74121	1909058	15
2	E5, E20	IC DEC 7402	1909004	14
3	E22, E26, E27	IC DEC 7400	1905575	13
4	E5, E6, E18, E19	IC DEC 7474	1905547	12
2	S1, S2	SWITCH, MINI SLIDE 2A 120VDC	1209698	11
8		PIN #61320-1 AMP	1209456	10
2		CONNECTOR 8 CIR MATE-N-LOK	1209340	9
2		#940 (CABLE CLAMP)	1202704	8
2		EYELET #A-1733 STIMPSON	9006745	7
4		EYELET GS4-J1 STIMPSON	9006750	6
2		HANDLE FLIP CHIP MAGENTA	9008337-06	5
REF		ETCHED CIRCUIT BOARD	5009583	4
REF		MODULE HISTORY DWG	8-MH-M869-0-6	3
REF		ASSY/DRILLING HOLE LAYOUT	8-AH-M869-0-5	2
REF		X-Y COORDINATE HOLE LOC	8-CO-M869-0-4	1

ETCH BOARD REV D

EQUIPMENT CORPORATION

POINT PLOT DSPL
CONT (CONT)

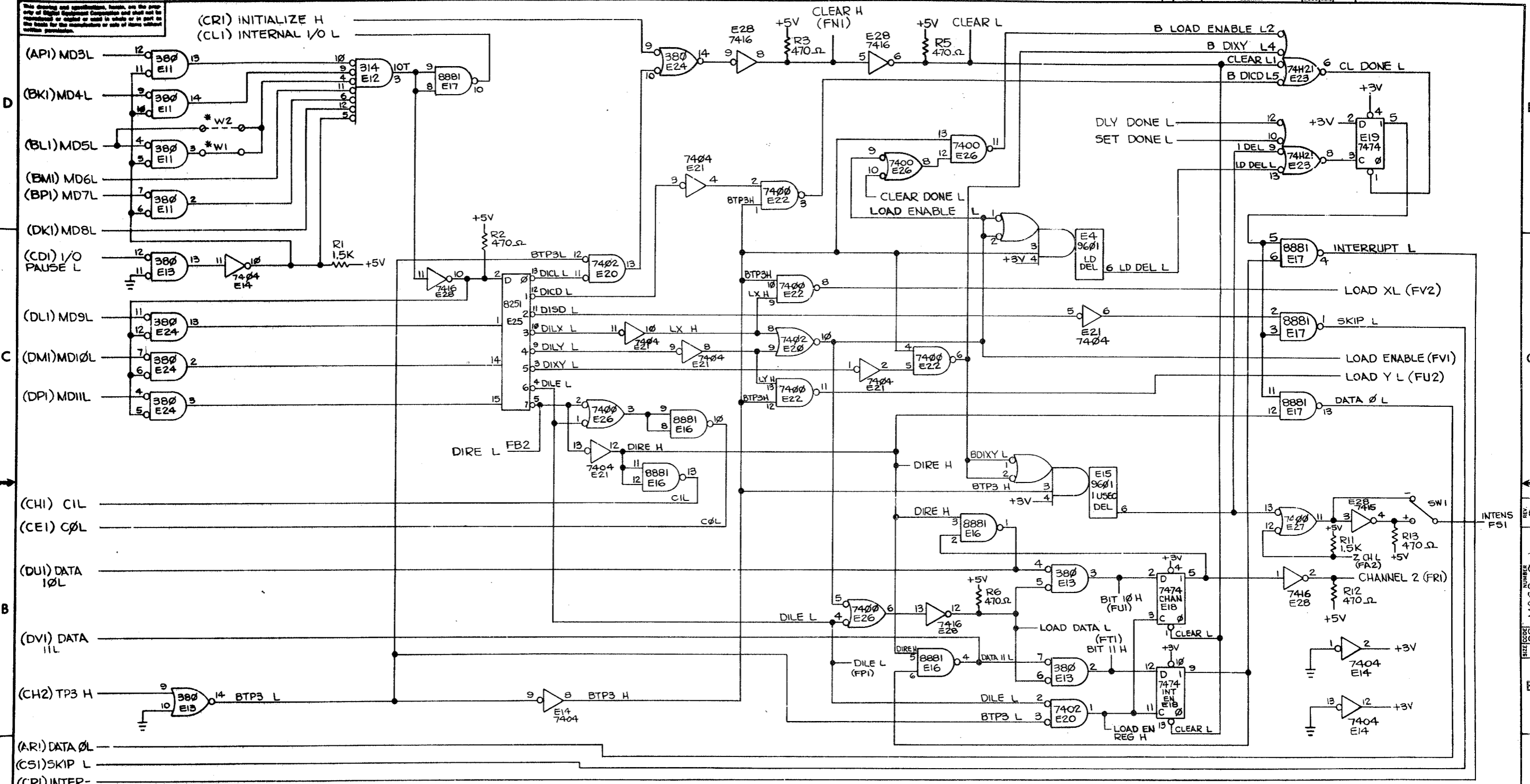
C-UA-VCR-E-0

DEC NO. EIA NO. DEC NO. EIA NO.

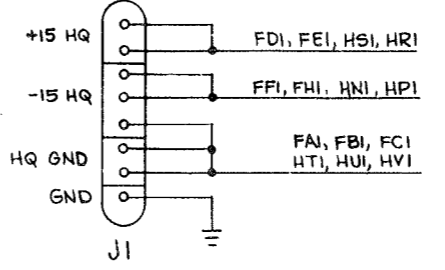
SEMICONDUCTOR CONVERSION CHART

SHEET 1 OF 5

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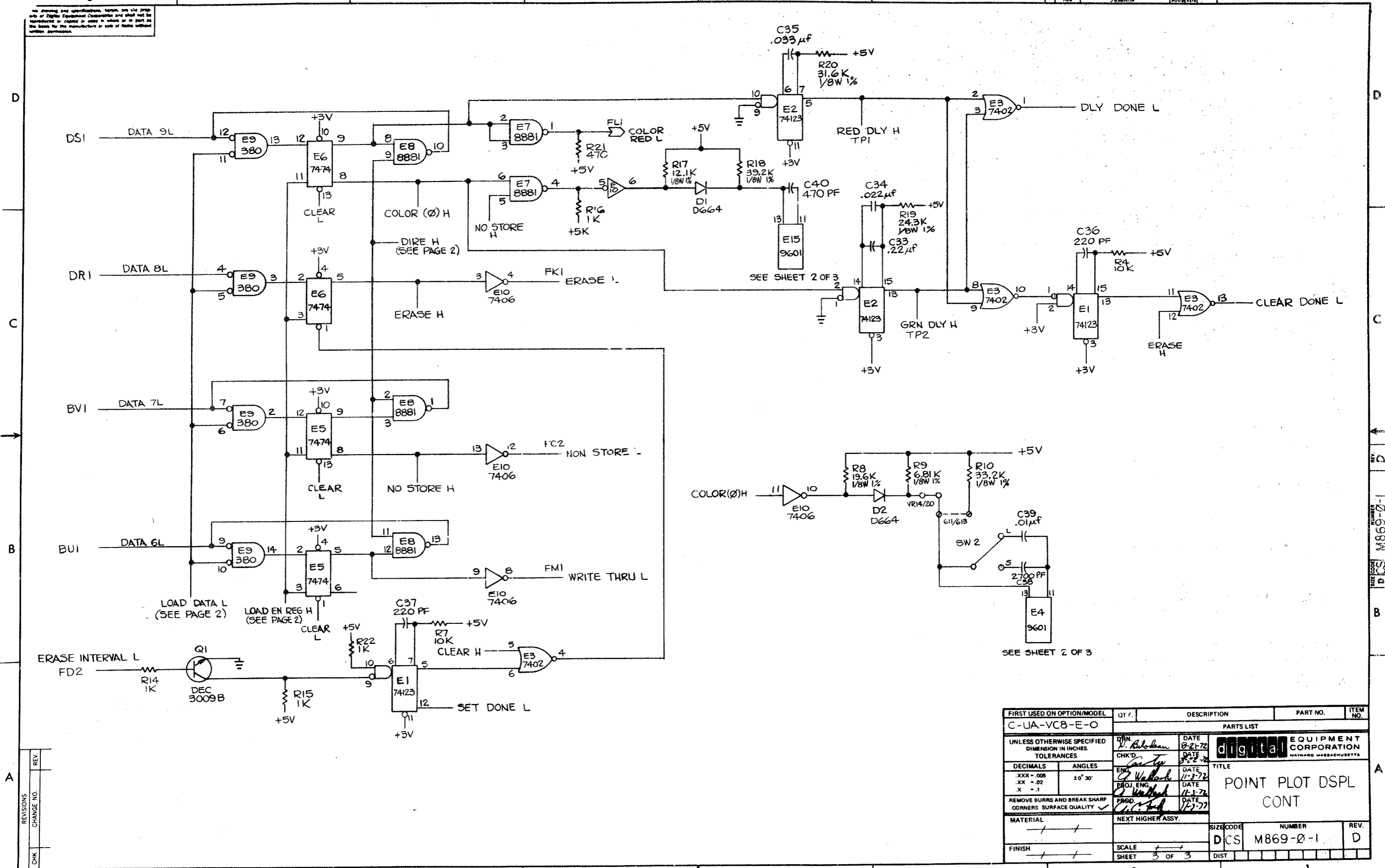


REVISIONS	EV
CHK	CHANGE NO.



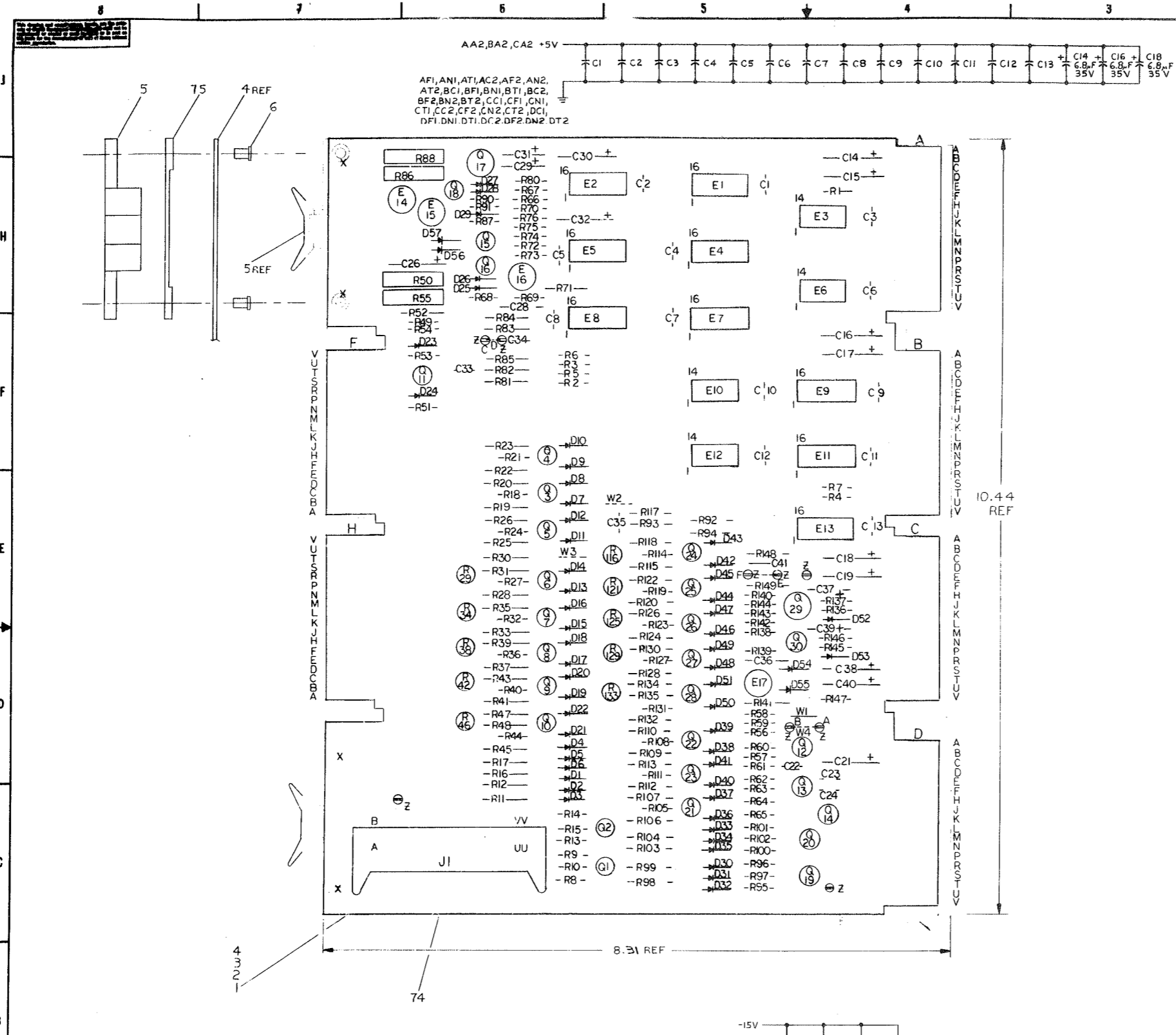
FIHST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
C-UA-VCB-E-0				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
.XXX = .005	10° 30'	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS		
.XX = .02		TITLE		
.X = .1		POINT PLOT DSPL CONT (CONT)		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		MATERIAL		
		NEXT HIGHER ASSY.		
FINISH		SCALE	NUMBER	REV.
		SHEET 2 OF 3	D CS M869-0-1	D

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FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
C-UA-VC8-E-0		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DATE 8-21-72	 DIGITAL EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS		
TOLERANCES	DATE 8-28-72			
DECIMALS	ANGLES	TITLE POINT PLOT DSPL CONT		
.XXX - .006	± 0° 30'			
.XX - .02				
.X - .1				
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE 11-3-72	PRODD. DATE 11-3-72		
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV.
FINISH	SCALE	DCS	M869-0-1	D
	SHEET 3 OF 3	DIST		

REV.	CHANGE NO.



- NOTES:
- UNLESS OTHERWISE NOTED: CAPACITORS ARE .01F, 100V, 20% TRANSISTORS ARE DEC 3009B DIODES ARE DEC 664
 - HQ GROUND IS INDICATED BY:
 - LOGIC GROUND IS INDICATED BY:
 - DIODES MARKED IN 7H MAY BE HP 5082-2800

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	QTY.	REF DESIGNATION	DESCRIPTION	PART NO.
2	J1	SPACER (CABLE CLAMP)	1202704	75			
1	J1	CONNECTOR BERG	1209941	74			
9		SPLIT LVF	9006735	73			
AR		WIRE, BUSSING, #22 AWG	9107560-01	72			
2	R29, R116	POT 500K 1/2W 10%	1309150-09	71			
2	R34, R121	POT 100K 1/2W 20% 62PR	1309150-05	70			
2	R46, R133	POT 20K 1/2W 20% 62PR	1309150-02	69			
2	R50, R55	POT 2K 3/4W 10% 76PR	1309143-08	68			
2	R56, R59	POT 500K 3/4W 10% 76PR	1309143-06	67			
2	R39, R42, R125, R129	POT 50K 1/2W 20% 62PR	1309150-11	66			
13	R48, R51, R61, R63, R67, R69, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100	RES 330K 1/4W 5%	1300309	65			
1	R54	RES 470K	1300316	64			
8	R67, R74, R80, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100	RES 18K	1302724	63			
1	R58	RES 1.2K	1301320	62			
2	R72, R142	RES 10K	1300479	61			
4	R66, R75, R136, R145	RES 4.7K	1300447	60			
2	R53, R87	RES 3.9K	1300444	59			
7	R57, R62, R64, R65, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100	RES 2.2K	1300417	58			
3	R73, R143, R65	RES 47K	1300202	57			
4	R2, R3, R5, R6	RES 2.7K	1300426	56			
3	R1, R4, R7	RES 1K	1300365	55			
1	R59	RES 6.8K	1301423	54			
1	R60	RES 100K	1300229	53			
24	R8, R9, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100	RES 3.3K 1/4W 5%	1300439	52			
1	R52	RES 3.16K 1/8W 1% MF	1303045	51			
2	R25, R112	RES 31.6K	1309416	50			
2	R37, R124	RES 3.83K	1309413	49			
2	R84, R149	RES 866K	1309293	48			
2	R17, R104	RES 256K	1305517	47			
2	R20, R107	RES 128K	1305516	46			
2	R23, R110	RES 64K	1305515	45			
2	R26, R113	RES 32K	1305514	44			
2	R47, R134	RES 200K	1305336	43			
4	R11, R12, R98, R99	RES 511K	1305323	42			
2	R19, R106	RES 121K	1305255	41			
2	R22, R109	RES 68.1K	1305252	40			
4	R48, R85, R92, R135	RES 1K	1304865	39			
2	R16, R103	RES 243K	1304843	38			
4	R41, R81, R93, R128	RES 1.96K	1304833	37			
6	R30, R31, R35, R117, R118, R122	RES 7.985K	1303206	36			
4	R45, R132, R141, R71	RES 1K	1303114	35			
2	R83, R148	RES 133K	1303038	34			
2	R28, R115	RES 14.7K	1302941	33			
2	R39, R126	RES 3.987K	1302478	32			
2	R43, R130	RES 1.992K	1302677	31			
4	R33, R82, R94, R120	RES 8.25K 1/8W 1% MF	1309420	30			
32	D9, D22, D25, D26, D38, D54	DIODE D664	1100114	28			
3	D23, D27, D28	DIODE IN825	1101385	27			
8	D24, D29, D54, D57	DIODE IN752A	1102809	26			
8	D2, D3, D5, D6, D31, D32, D34, D35	DIODE FD777	1103041	25			
8	D1, D4, D7, D8, D30, D33, D36, D37	DIODE IN5711	1106003	24			
1	C22	CAP 10PF 100V 5% DM	1000006	23			
2	C34, C41	CAP 47PF 100V 5% DM	1000011	22			
12	C14, C19, C21, C26, C32, C30, C38, C40	CAP 6.8F 35V 20% TANT	1000067	21			
15	C1, C3, C23, C24	CAP .01F 100V 20% DISC	1001610	20			
4	C29, C31, C37, C39	CAP 15F 35V 10% TANT	1002190	19			
2	C28, C36	CAP 3300PF 100V 10%	1005116	18			
2	C33, C35	CAP 100PF 100V 5% DM	1000016	17			
4	Q15, Q17, Q18, Q29	TRANS DEC 2219	1501881	16			
21	Q1, Q10, Q13, Q19, Q28	TRANS DEC 3009B	1503100	15			
4	Q11, Q14, Q16, Q30	TRANS DEC 6534D	1503409	14			
1	Q12	TRANS 2N4313	1505715	13			
2	E14, E15	I.C. LM302	1909343	12			
2	E10, E12	I.C. DEC 7404	1909686	11			
2	E16, E17	I.C. MC1439	1909761	10			
3	E9, E11, E13	I.C. DEC 8235	1909935	9			
2	E3, E6	I.C. DEC 6380	1909971	8			
6	E1, E2, E4, E5, E7, E8	I.C. DEC 74193	1910018	7			
4		EYELET GS-411 STIMPSON	906750	6			
2		HANDLE FLIP CH P MAGENTA	9038317-06	5			
2		ETCHED CIRCUIT BOARD	5009625	4			
REF		MODULE HISTORY DWG	B-MH-M885-0-6	3			
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M885-0-3	2			
REF		X-Y COORDINATE HOLE LOC	K-CO-M885-0-4	1			

IC TYPE	QTY	REF	LOCATIONS
DEC 6380	1	8	76 22 W4-A W4-B
DEC 74193	8	16	76 22 W3-A W3-B
			76 22 W2-A W2-B
			76 22 W1-A W1-B

JUMPER LIST

ITEM NO	AWG	FROM PT	TO PT

2N4313	IN5711	IN752A	SAME	C-UA-VCB-E-0	REVISION	DATE
DEC 6534D	MPS6534	IN825	SAME			
DEC 3009B	ZN3009B					
DEC 2219	ZN2219					
FD777	SAME					
D664	IN3606					
DEC NO.	EIA NO.	DEC NO.	EIA NO.			

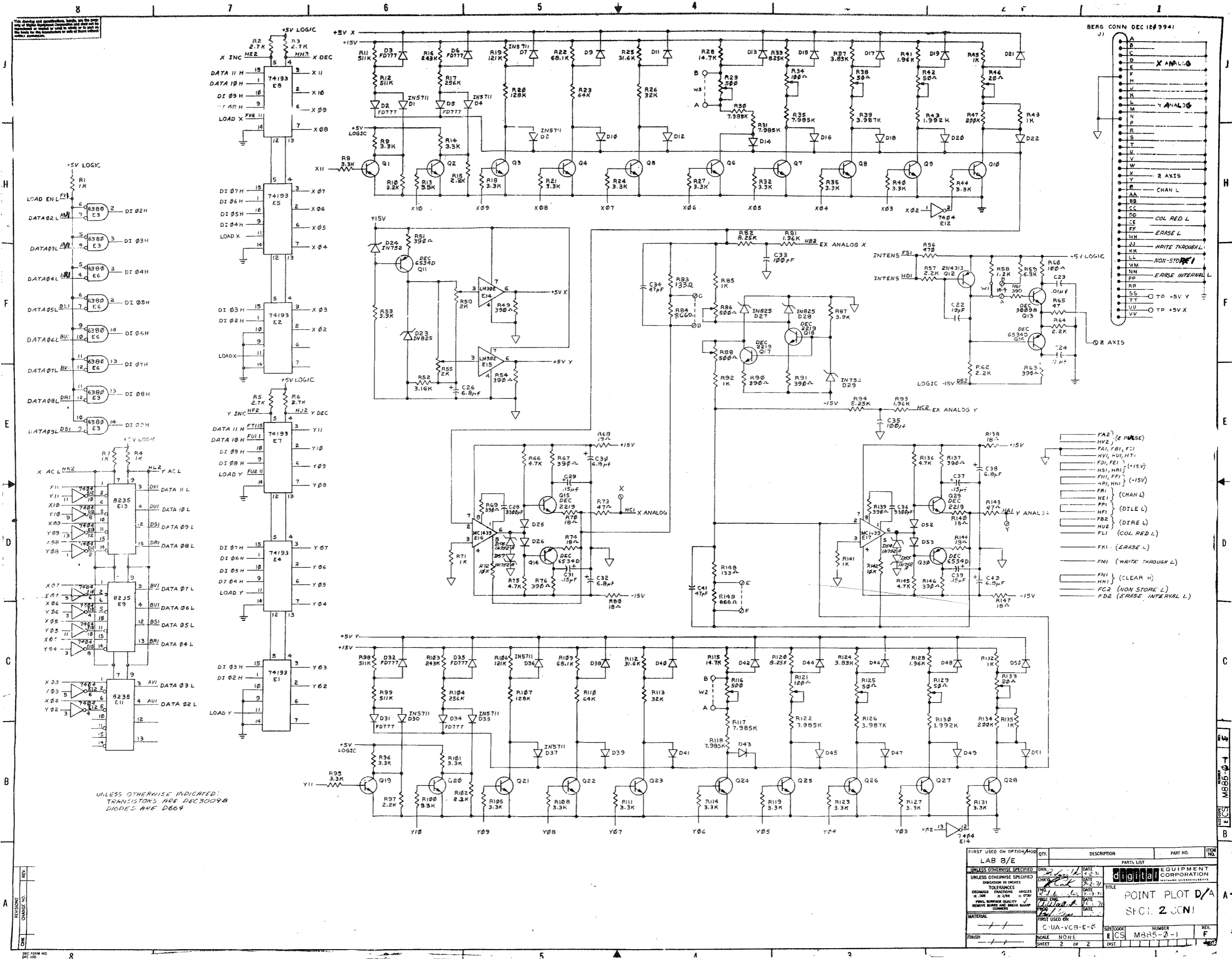
SEMICONDUCTOR CONVERSION CHART

ETCH BOARD REV E

EQUIPMENT CORPORATION

POINT PLOT D/A
SECT. 2 CONT

REVISION: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100



UNLESS OTHERWISE INDICATED:
TRANSISTORS ARE DEC3004B
DIODES ARE D664

FIRST USED ON OPTION/MOD	QTY	DESCRIPTION	PART NO.	ITEM NO.
LAB 8/E				
UNLESS OTHERWISE SPECIFIED	OR	DATE	PARTS LIST	
DIMENSION IN INCHES	CHKD	7-2-77	digital EQUIPMENT CORPORATION	
TOLERANCES	ENG		TITLE	
DECIMAL FRACTIONS	PROJ. ENG.		POINT PLOT D/A	
ANGLES	DATE		SPEC. 2 CON	
PENCIL SURFACE QUALITY				
REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL	FIRST USED ON			
	C-UA-VG-E-C			
FINISH	SCALE NONE			
	SHEET 2 OF 2			

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS
ACCESSORY LIST

MADE BY K.Symes
DATE 12-17-71
ENG *D. Vukobratovich*
DATE 12-17-71

CHECKED *M. Savarino*
DATE 12/21/71
PROD *Paul Spivey*
DATE 11/17/71

SECTION
ISSUED SECT.

LEGEND		QUANTITY / VARIATION	
D	DOCUMENT CHANGE NOTICE	VC8-E Alone	1
DN	PAPER TAPE ASCII	VC8-E and VR14	1
PA	PAPER TAPE BINARY	VC8-E and VM03	1
PB	PAPER TAPE BINARY		
PM	PAPER TAPE READ-IN-MODE		

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	VC8-E Alone	VC8-E and VR14	VC8-E and VM03	KIT CHECK	BY DATE	INSTALLATION CHECK	BY DATE
1	M869	VC8-E Point Plot Display Control Module	1	1	1				
2	M885	D-A Point Plot Control Module	1	1	1				
3	H851	Edge Connector	2	2	2				
4	7008499	User Display Cable	1	-	-				
5	BC01K	VR14 Display Cable	-	1	-				
6	BC01L	602 Display Cable (part of VM03)	-	-	1				
7	--	Analog High Quality Power Assembly	*	*	*				
	7008370-1	115V Table-top Mounting or							
	7008370-2	230V Table-top Mounting or							
	7008477-1	115V Rack Mounting or							
	7008477-2	230V Rack Mounting							
	7008375	Analog Power Cable							
		* Item 7 is not to be supplied to systems in field with an AD8-EA already installed. HQ power supply type # is tailored to specific system in Systems Production.							
8	VC8-E	VC8-E Display Control Print Set	1	1	1				
9	LAB8-E	LAB8-E Print Set	1	1	1				

TITLE VC8-E Accessory List
ASSY. NO. **AAL**
SHEET 1 OF 2
SIZE CODE **AAL**
DIST. **AAL**
NUMBER VC8-E -3
REV. **AAL**
ECONO

DEC FORM NO. DRA 121

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS
ACCESSORY LIST

MADE BY K.Symes
DATE 12-17-71
ENG *D. Vukobratovich*
DATE 12-17-71

CHECKED *M. Savarino*
DATE 12/21/71
PROD *Paul Spivey*
DATE 11/17/71

SECTION
ISSUED SECT.

LEGEND		QUANTITY / VARIATION	
D	DOCUMENT CHANGE NOTICE	VC8-E Alone	1
DN	PAPER TAPE ASCII	VC8-E And VR14	1
PA	PAPER TAPE BINARY	VC8-E and VM03	1
PB	PAPER TAPE BINARY		
PM	PAPER TAPE READ-IN-MODE		

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	VC8-E Alone	VC8-E And VR14	VC8-E and VM03	KIT CHECK	BY DATE	INSTALLATION CHECK	BY DATE
10	MAINDEC 8E-D6CA-AB	VC8E Diagnostic - Punched Binary Tape	1	1	1				
11	MAINDEC 8E-D6CA-DL-(D)	VC8E Diagnostic - Document Listing	1	1	1				
12	DEC-LB-HRZA-D	LAB8-E User's Handbook	1	1	1				
13	DEC-LB-HXZA-D	LAB8-E Maintenance Manual	1	1	1				
14		LAB8-E Programming Card	1	1	1				
		NOTE: When item 12 or 13 is temporarily waived, ship the following:							
	A-SP-VC8E-1	VC8E Engineering Specification	1	1	1				
	A-SP-VC8E-2	VC8E Acceptance Procedure	1	1	1				

TITLE VC8-E Accessory List
ASSY. NO. **AAL**
SHEET 1 OF 2
SIZE CODE **AAL**
DIST. **AAL**
NUMBER VC8-E -3
REV. **AAL**
ECONO