

RK05
disk drive
engineering drawings

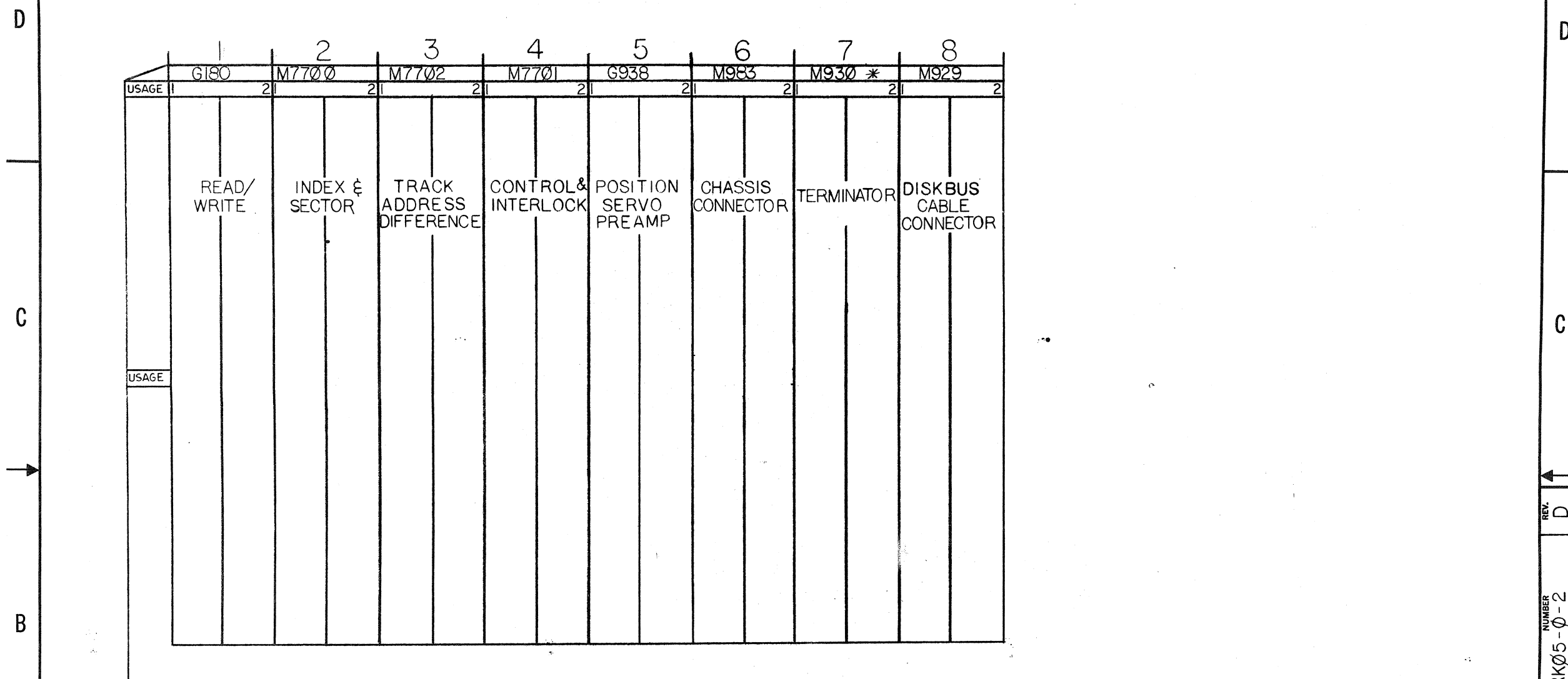
R. Tinga.
23701.

digital equipment corporation • maynard, massachusetts

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NOTE:

TERMINATOR OR DISK BUS CABLE CONNECTOR MAY BE INTERCHANGED BETWEEN SLOTS 7 AND 8.

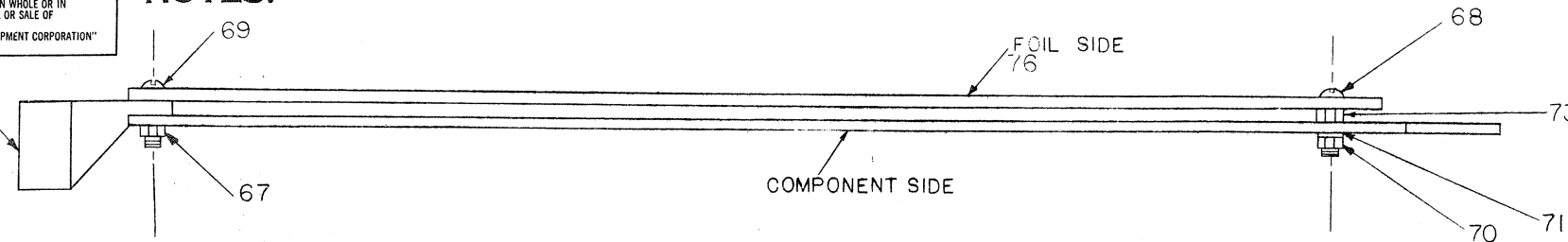


* IF MORE THAN ONE DRIVE IS USED, M930 IS REPLACED BY M929 (BC11A), M930 IS USED IN THE LAST DRIVE ON THE BUS.

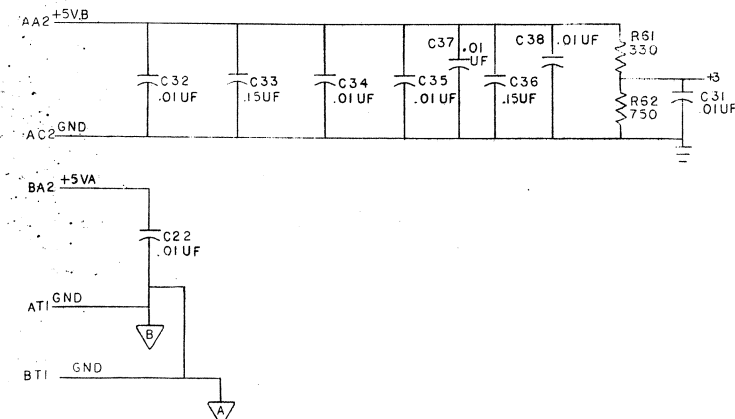
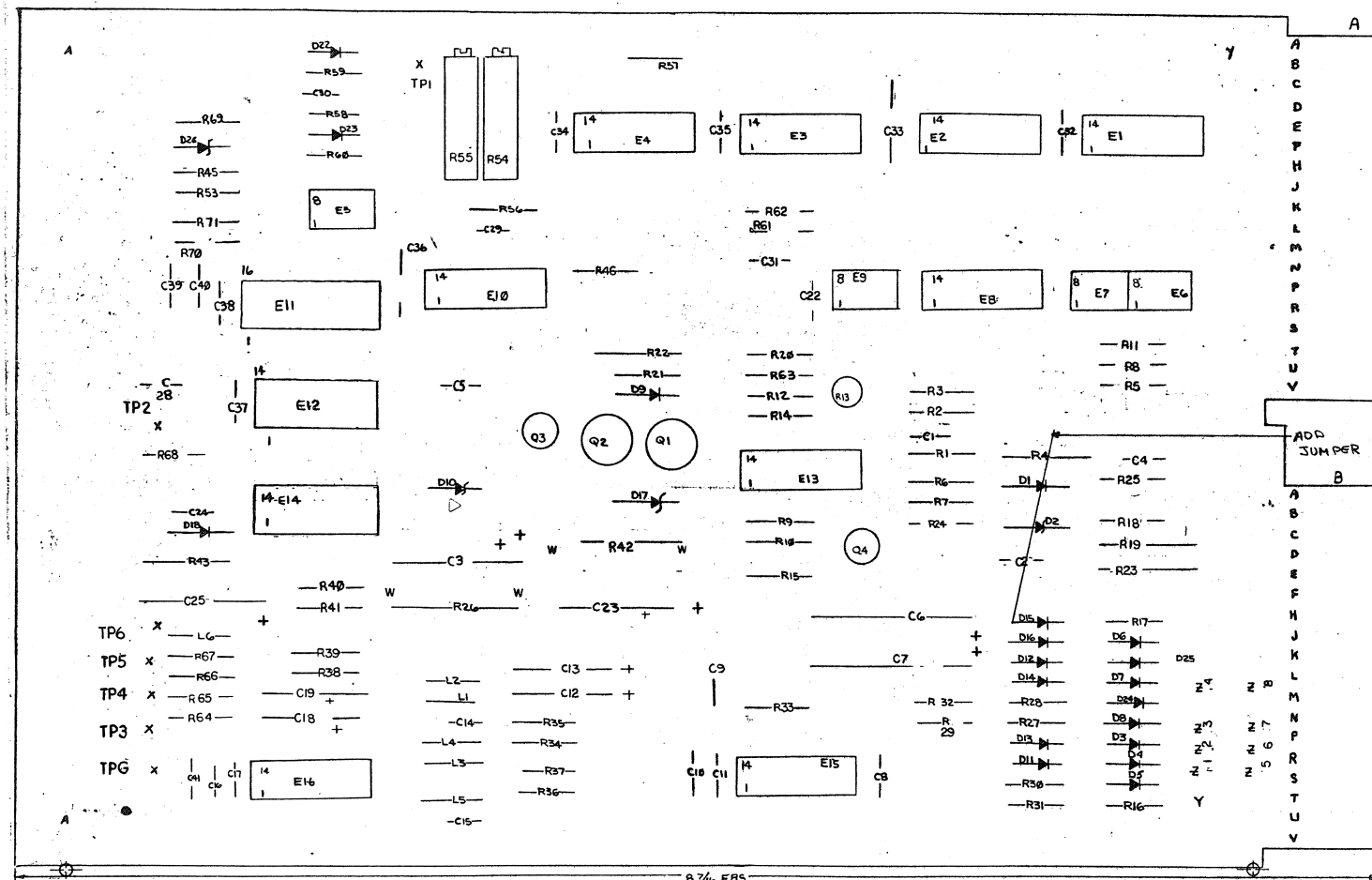
REVISIONS		REV.
CHK	CHANGE NO.	
✓	RK05-00002	A
✓	M. Jensen 1-11-72	
✓	D. Jensen	
✓	M. Jensen 2-9-72	B
✓	RK05-00006	
✓	M. Jensen 2-9-72	
✓	J. Jensen	
✓	M. Jensen 3-11-72	C
✓	RK05-00023	
✓	M. Jensen 3-25-72	
✓	G. SCHNEIDER	
✓	G. SCHNEIDER 10/1/72	
✓	RK05-00040	D
✓	E. Allen 7-7-73	
✓	G. SCHNEIDER	
✓	G. SCHNEIDER 9/2/73	

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
RK05					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		PARTS LIST			
DECIMALS		DRM	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
.XXX = .005		CHK/B	DATE		
.XX = .02		ENG	DATE		
.X = .1		PROJ. ENG	DATE		
ANGLES		PROD	DATE		
±0° 30'				TITLE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓		NEXT HIGHER ASSY.		MODULE UTILIZATION	
MATERIAL		B-DD-RK05-0		SIZE CODE	NUMBER
FINISH		SCALE NONE		C MU	RK05-0-2
		SHEET 1 OF 1		DIST.	REV. D

NOTES:



NOTE:
DO NOT INSERT →
HANDLE HOLE EYELETS
ON OUTSIDE HANDLE
HOLES: (2 PLCS)



1	D26	DIODE IN748A (3.9V ZENER)	1100122
1	R69	RES. 180 1/4W 5%	1301322
2	R7,R10	RES. 100 1/4W 5%	1300229
1		NOISE SHIELD	5009893
2		HANDLE,FLIP CHIP-GREEN	9008337-01
7	TPG,TPI THRU TP6	SWAGE LUG	9007791
2		HEX NUT,NYLON,*2-56	9007263
2		EYELET *GS4-7	9006732
2		INTERNAL LOCK WASHER *2-56	9006631
2		HEX NUT *2-56	9006555
2		SCREW 4/40X3/8	9006011-4
2		SCREW PAN HD *2-56X5/16	9006002-1
2		KEP NUT 4/40	9006557

	7300	930W	3300J3215	
3	E6.E7E9	I.C DEC 75452	I910645	66
2	E15,I6	I.C DEC 733	I910644	65
1	E14	I.C DEC 1414	I910337	64
1	E5	I.C DEC 741	I910298	63
1	E1	I.C DEC 8881	I909705	62
2	E2.E8	I.C DEC 380	I909485	61
1	E10	I.C DEC 9601	I909373	60
1	E13	I.C DEC 7472	I905588	59
2	E4.E12	I.C DEC 7400	I905575	58
1	E3	I.C DEC 7474	I905547	57
1	L6	INDUCTOR 120UH	I610663	56
2	L1,L2	INDUCTOR 56UH	I610661	55
3	L3,L4,L5	INDUCTOR 100UH	I610662	54
1	Q3	TRANSISTOR DEC 6534C	I503409-02	53
1	Q4	TRANSISTOR DEC 3009B	I503100	52
2	Q1,Q2	TRANSISTOR 2N2904	I501742	51
1	R13	POT 1K 1/2W 20% 62PR	I309150-03	50
2	R54,55	POT 10K 3/4W 10% 76PR	I309143-10	49
2	R16,R17	RES.27K- 1/4W 5%	I305346	47
2	R27,R28	RES.8.2K 1/4W 5%	I303179	46
1	R60	RES.220K 1/4W 5%	I302092	45
1	R4	RES.270 1/2W 5%	I300285	44
2	R40,R41	RES.560 1/4W 5%	I301890	43
6	R6,9,45,53,70,71	RES.5.6K 1/4W 5%	I301874	42
1	R11	RES.1K 1/4W 5%	I301475	41
1	R58	RES.3.3K 1/4W 5%	I300439	40
1	R62	RES.750 1/4W 5%	I301401	39
2	R15,R21	RES.1.2K 1/4W 5%	I301320	38
2	R30,R31	RES.15K 1/4W 5%	I300496	37
8	R5,8,18,38,39,57	RES.10K 1/4W 5%	I300479	36
1	R59	RES.4.7K 1/4W 5%	I300447	35
1	E11	I.C DEC 73123	I90436	34
16	R1,R2,R3,R20,R34-37	RES. 1K 1/4W 5%	I300365	33
	R46,R56,R63-68			
2	R24,R14	RES.470 1/4W 5%	I300316	31
1	R43	RES.470 1/2W 5%	I300315	30
3	R22,R25,R61	RES.33 1/4W 5%	I300295	29
2	R29,R32	RES.220 1/4 5%	I300271	28
2	R26,R42	RES.180 1/4 5%	I300262	27
1	R19	RES.160 1/2 5%	I300260	26
1	R12	RES.150 1/2W 5%	I300250	25
1	R23	RES.150 1/2W 5%	I300249	24
1	R33	RES.47 1/4W 5%	I300202	23
8	I-8	GOLD WIREWRAP PINS	I210395-1	22
18	D103-9,D11-16,D22-25	DIODE DS72	I105273	21
1	D2	DIODE IN 751A(5.1V ZENER)	I100994	20
				19
3	D10, D17, D18	DIODE IN 753A(6.2V ZENER)	I102421	18
13	C9,C33,C36	CAP.15UF 50V 10% KPL(CARBON)	I010031	17
1	C15	CAP.18PF 100V 5% D.M.	I002608	16
4	C12,C13,C18,C19	CAP.15UF 35V 20% S.TANT	I002180	15
14	C40,I1,I6,I7,22,24,28,31	CAP.01UF 100V 20% DISC	I001610	14
	32,34,35,37,38			
2	C6,C7	CAP 10UF 35V 20% S.TANT	I000069	13
3	C3,C23,C25	CAP 6.8UF 35V 20% S.TANT	I000067	12
1	C2	CAP 680PF 100V 5% D.M.	I000026	11
2	C5,C30	CAP 470PF 100V 5% D.M.	I000024	10
1	C29	CAP 150PF 100V 5% D.M.	I000019	9
9	C41	CAP 27PF 100V 5% D.M.	I001739	8
8	C14	CAP 56PF 100V 5% D.M.	I000012	7
7	C1,C39,C40	CAP 47PF 100V 5% D.M.	I000011	6
5	C8	CAP 33PF 100V 5% D.M.	I000009	5
		ETCHED CIRCUIT BOARD	5009743	4
		MODULE ECO HISTORY	B-MH-G180-0-6	3
		ASSY/DRILLING HOLE LAYOUT	E-AH-G180-0-5	2
		X-Y COORDINATE HOLE LOCATION	K-CO-G180-0-4	1

QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
7	ETCH BOARD REV.			

DEC 380	1	8
DEC 75452	4	8
IC TYPE	GND	+5V

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

8

7

6

5

4

3

2

1

DEC FORM NO. 100-100-0

DRN. R. DOUGLETTE	DATE 10-22-71
CHK'D. NANCY MOORE	DATE 11-30-71
ENG. DALE JENSEN	DATE 1-22-72
PROJ. ENG. A KARLSBERG	DATE 1-22-72
PROD.	DATE
NEXT HIGHER ASSY	

digital

TITLE
DEC PACK READ/
WRITE

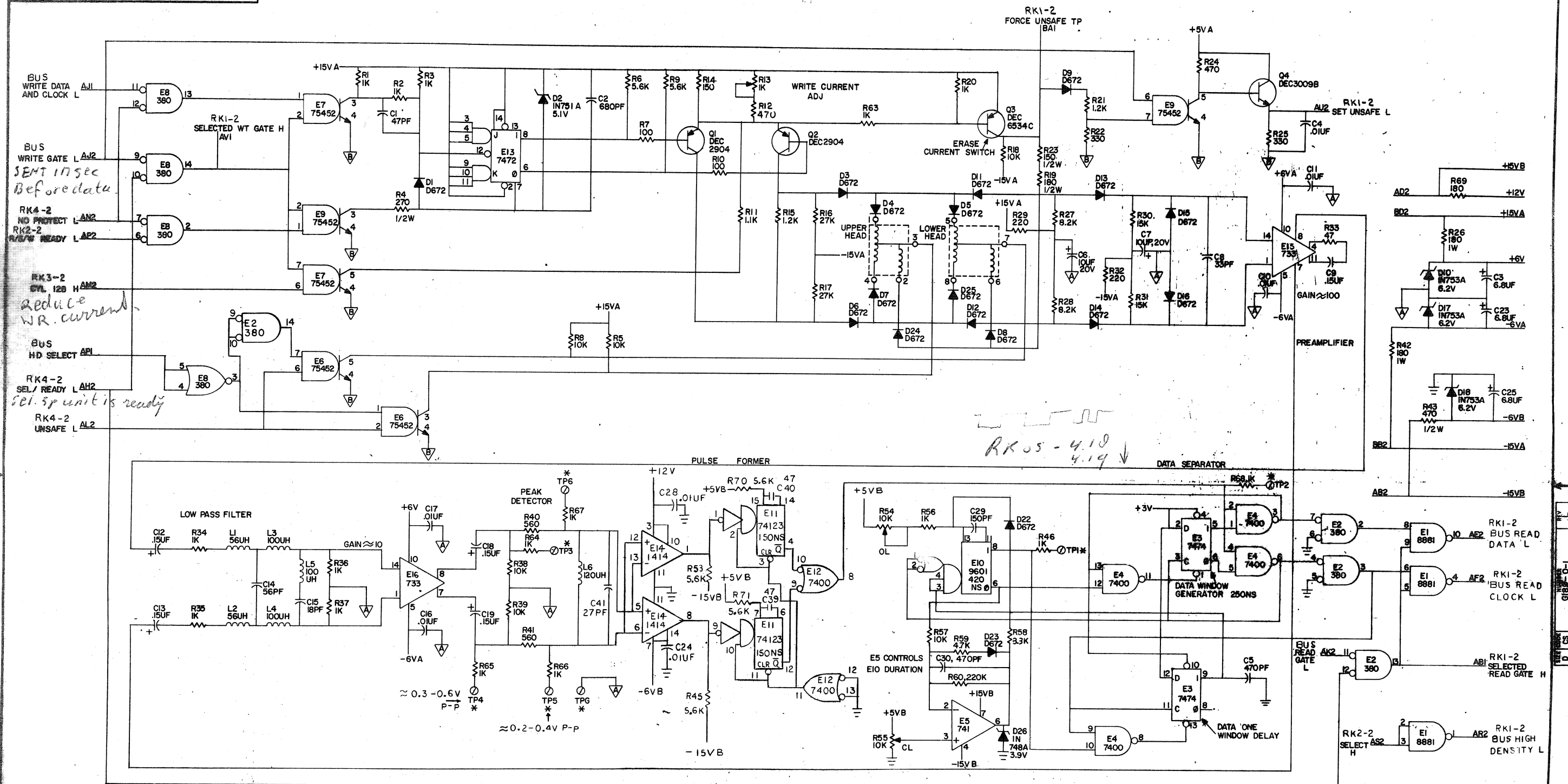
SEMICONDUCTOR CONVERSION CHART

SCALE	
SHEET 1	OF 2

SIZE	CODE	NUMBER	REV.
D	CS	G180-0-1	L
DIST.			

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1-0-0916 3000 1/15



UNLESS OTHERWISE INDICATED:

* INDICATES SWAGE LUG

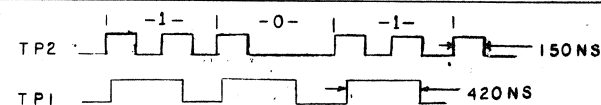
▽ = ANALOG GND "A" BTI

▽ = ANALOG GND "B" ATI

⊥ = DIGITAL GND AC2

--- = COMPONENTS NOT MOUNTED ON BOARD

ALL TIMES INDICATED ARE NOMINAL



SLOT -1

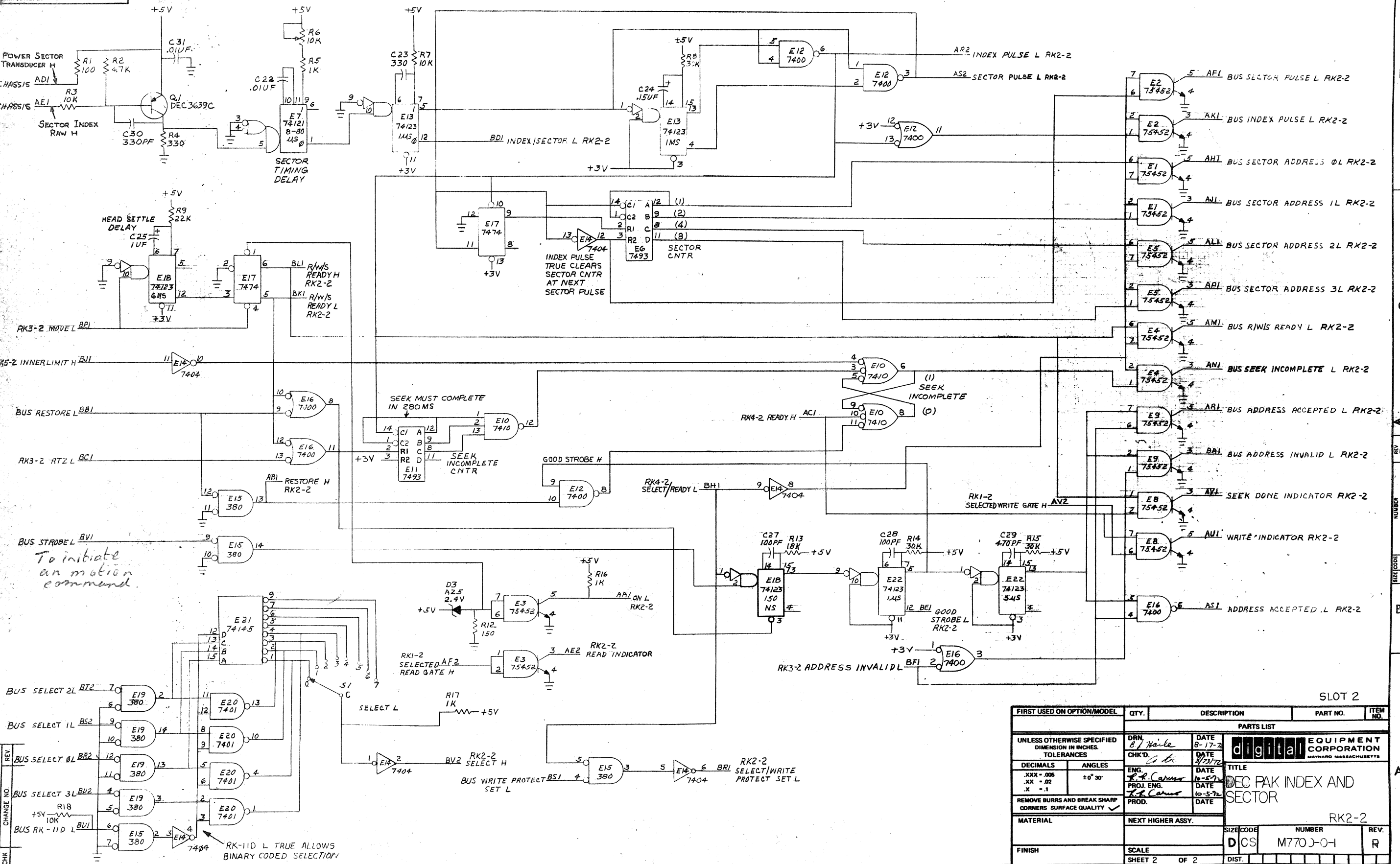
REV	DATE	TRANSISTOR & DIODE CONVERSION CHART				TITLE
		DEC	EIA	DEC	EIA	
1	8/1/71	2N2904	2N2904	1N753A	1N753A	DEC PACK READ/WRITE
2	8/1/71	2N2904	2N2904	1N753A	1N753A	
3	8/1/71	2N2904	2N2904	1N753A	1N753A	
4	8/1/71	2N2904	2N2904	1N753A	1N753A	
5	8/1/71	2N2904	2N2904	1N753A	1N753A	
6	8/1/71	2N2904	2N2904	1N753A	1N753A	
7	8/1/71	2N2904	2N2904	1N753A	1N753A	
8	8/1/71	2N2904	2N2904	1N753A	1N753A	
9	8/1/71	2N2904	2N2904	1N753A	1N753A	
10	8/1/71	2N2904	2N2904	1N753A	1N753A	



SIZE	CODE	NUMBER	REV
D	CS	M7700-0-1	D

TITLE		RK2-1	
digital		DEC PAK INDEX AND SECTOR	
EQUIPMENT CORPORATION	SIZE D	CODE CS	NUMBER M7700-0-1
			REV D

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FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN E. J. Niles	DATE 8-17-72	PARTS LIST digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS .XXX - .006 XX - .02 .X - .1		CHK'D S. L.	DATE 8/21/72		
ANGLES ±0° 30'		ENG. R. L. Caruso	DATE 10-5-72	TITLE DEC PAK INDEX AND SECTOR RK2-2	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROJ. ENG. R. L. Caruso	DATE 10-5-72		
MATERIAL		PROD.	DATE	SIZE CODE D CS	
FINISH		NEXT HIGHER ASSY.			
SCALE		SCALE		NUMBER M7700-0-1	
SHEET 2 OF 2		DIST.			
				REV. R	

BRUNING 40-323 15840
DEC FORM NO
DRD 102-B

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1-0-1022W 3000 3215

NOTE:
THIS TP WAS ADDED PER
ECO 00008 FOR AUTO
MODULE TESTING ONLY
AND WILL NOT BE ON
ETCH REVS A THRU J

UNLESS OTHERWISE INDICATED:
PIN 7 = GND ON ALL IC'S EXCEPT
DEC 7493 PIN 5 = +5V, PIN 10 = GND
DEC 74123 PIN 16 = +5V, PIN 8 = GND
DEC 75451 PIN 8 = +5V, PIN 4 = GND

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
ETCH BOARD REV				
REV	CHANGE NO.	REVISIONS	DATE	BY
1			10-29-71	DRN
2			11-3-71	CHKD. MURPHY MOORE
3			12-9-71	ENG. J. C. LAMBERT
4			1-22-72	PROJ. ENGR. K. J. O'NEILL
5			1-22-72	PROD. J. H. HARRIS
6			1-22-72	TEST. J. H. HARRIS
7			1-22-72	QA. J. H. HARRIS
8			1-22-72	SHIP. J. H. HARRIS
9			1-22-72	REWORK. J. H. HARRIS
10			1-22-72	REWORK. J. H. HARRIS
11			1-22-72	REWORK. J. H. HARRIS
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99			1-22-72	REWORK. J. H. HARRIS
100			1-22-72	REWORK. J. H. HARRIS

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

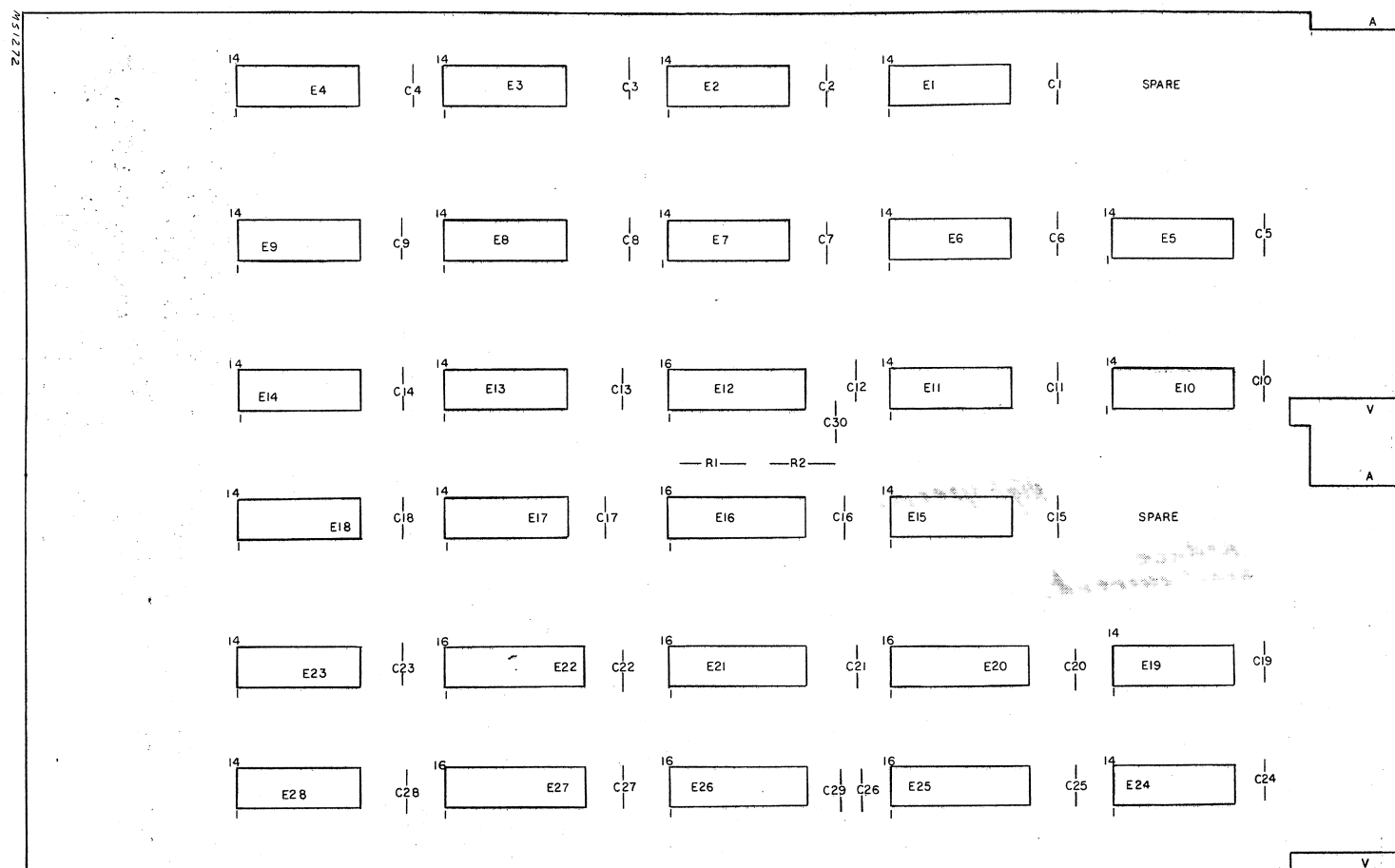
TITLE
RK05
CONTROL +
INTERLOCK

SIZE CODE NUMBER REV.
DCS M7701-0-1

SEMICONDUCTOR CONVERSION CHART

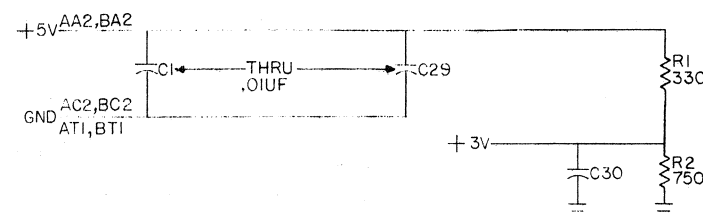
SHEET 2 OF 2

SHEET 2 OF 2




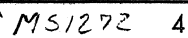
UNLESS OTHERWISE INDICATED:


PIN 8 = +5V	
PIN 1 = GND	IC380
PIN 5 = +5V	
PIN12 = GND	DEC 7483
PIN16 = +5V	
PIN 8 = GND	DEC 74175
PIN16 = +5V	
PIN 8 = GND	DEC 74193
PIN14 = +5V	
PIN 7 = GND	ALL OTHER IC'S



4		EYELET #034-7	9006732	22
2		HANDLE, FLIP CHIP - MAGENTA	9008337-06	21
2	E20, E25	I.G. DEC 74175	1910651	20
2	E5, E17	I.G. DEC 7437	1910091	19
2	E19, E24	I.G. DEC 380	1909485	18
2	E12, E16	I.G. DEC 74193	1910018	17
2	E23, E28	I.O. DEC 7486	1910011	16
4	E21, E22, E26, E27	I.C. DEC 7483	1909932	15
2	E7, E11	I.C. DEC 7404	1909686	14
1	E1	I.G. DEC 7402	1909004	13
1	E14	I.G. DEC 7440	1905579	12
2	E15, E18	I.O. DEC 7410	1905576	11
4	E2, E6, E10, E13	I.O. DEC 7400	1905575	10
4	E3, E4, E8, E9	I.G. DEC 7474	1905547	9
1	R2	RES. 750 $\frac{1}{2}$ W 5%	1301101	8
1	R1	RES. 330 $\frac{1}{2}$ W 5%	1300295	7
		GRIFLET	1210244-0	6
30	C1 - C30	CAP. .01UF 100V 20% DISC	1001610	5
1		ETCHED CIRCUIT BOARD	5009710	4
		MODULE ECO HISTORY	B-MH-M7702-0-6	3
		ASSY/DRILLING HOLE LAYOUT	E-AH-M7702-0-5	2
		X-Y COORDINATE HOLE LOCATION	K-CO-M7702-0-4	1

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
ETCH BOARD REV	C			
		DRN. <i>ROGER J. DOUKETTE</i>	DATE <i>11-7-71</i>	 DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
		CHK'D <i>Samuel</i>	DATE <i>11-25-71</i>	
		ENG. <i>C. E. Magnuson</i>	DATE <i>12-16-71</i>	
		PROD. ENG. <i>C. E. Magnuson</i>	DATE <i>12-16-71</i>	
		PROD.	DATE	
		NEXT HIGHER ASSY		
DEC NO.	EIA NO.	SCALE	TITLE	
		SHEET 1 OF 2	DEC PACK CYL ADDR AND DIFF RK3-1	
CONVERSION CHART		DIST.	SIZE CODE D CS	NUMBER M7702-0-1
			REV. C	



		QTY		REF DESIGNATION		DESCRIPTION				PART NO.		SLOT 3		ITEM NO.			
PARTS LIST																	
ETCH BOARD REV				C													
CHK	CHANGE NO.	REV	REVISIONS					DRN. <i>Roger V. Dougherty</i>	DATE	<div> digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS</div> <div>TITLE DEC PACK CYL ADDR AND DIFF</div>							
						CHK'D <i>Smith</i>	DATE										
						ENG. <i>CC Simmons</i>	DATE										
						PROB'G. <i>CC Simmons</i>	DATE										
						PROD.	DATE										
						NEXT HIGHER ASSY				RK3-2							
						SCALE											
						SHEET 2 OF 2											
						SIZE CODE											
						NUMBER											
				DEC NO.	EIA NO.	DEC NO.	EIA NO.	D/Cs	M7702-0-1	REV. C							
SEMICONDUCTOR CONVERSION CHART																	