MASTER DRAWING LIST

MAINTENANCE MANUALS NO.	TITLE	UNIT VARIATIONS KA8-E
KA8-E	POSITIVE I/O BUS INTERFACE	X

USED ON OPTIONS							
PDP8/E							
PDP8/M							

REVISIONS

REV.	DATE	CHG. NO.	APP'D.
A	3/23/71	00001	L.K.
B	7/71	MISC-86	A.V.
C	8/71	KA8E-2	A.V.
D	10/71	KA8E-3	A.V.
E	1/72	8E-00055	A.V. for J.C.

DRN. K. GULICK	DATE 1/18-71	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D. K. GULICK,	DATE 1/18-71	TITLE POSITIVE I/O BUS INTERFACE	
ENG. L. KLOTZ	DATE 3-5-71		
PROJ. ENG. R. VOGELSANG	DATE 3-5-71		
PROD. L SAYLOR	DATE 3-5-71		
FIRST USED ON PDP8/E		SIZE A	CODE ML	NUMBER KA8-E	REV. E
SCALE NONE			
SHEET 1 OF 2		DIST.	

PRINT SET KA8-E	DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE	OPTION NO.
–	A-PL-KA8-E-Ø	A	1	POSITIVE I/O BUS INTERFACE (PARTS LIST)	
X	E-CS-M8350-Ø-1	#	3	POSITIVE I/O BUS INTERFACE	
	~~A-SP-KA8-E-1~~	~~REV~~	~~2~~	~~KA8-E/KD8-E MANUFACTURING TEST PROCEDURE~~	
–	A-SP-KA8-E-2		2	TEST PROCEDURE	
–	A-SP-KA8-E-3		3	ACCEPTANCE PROCEDURE	

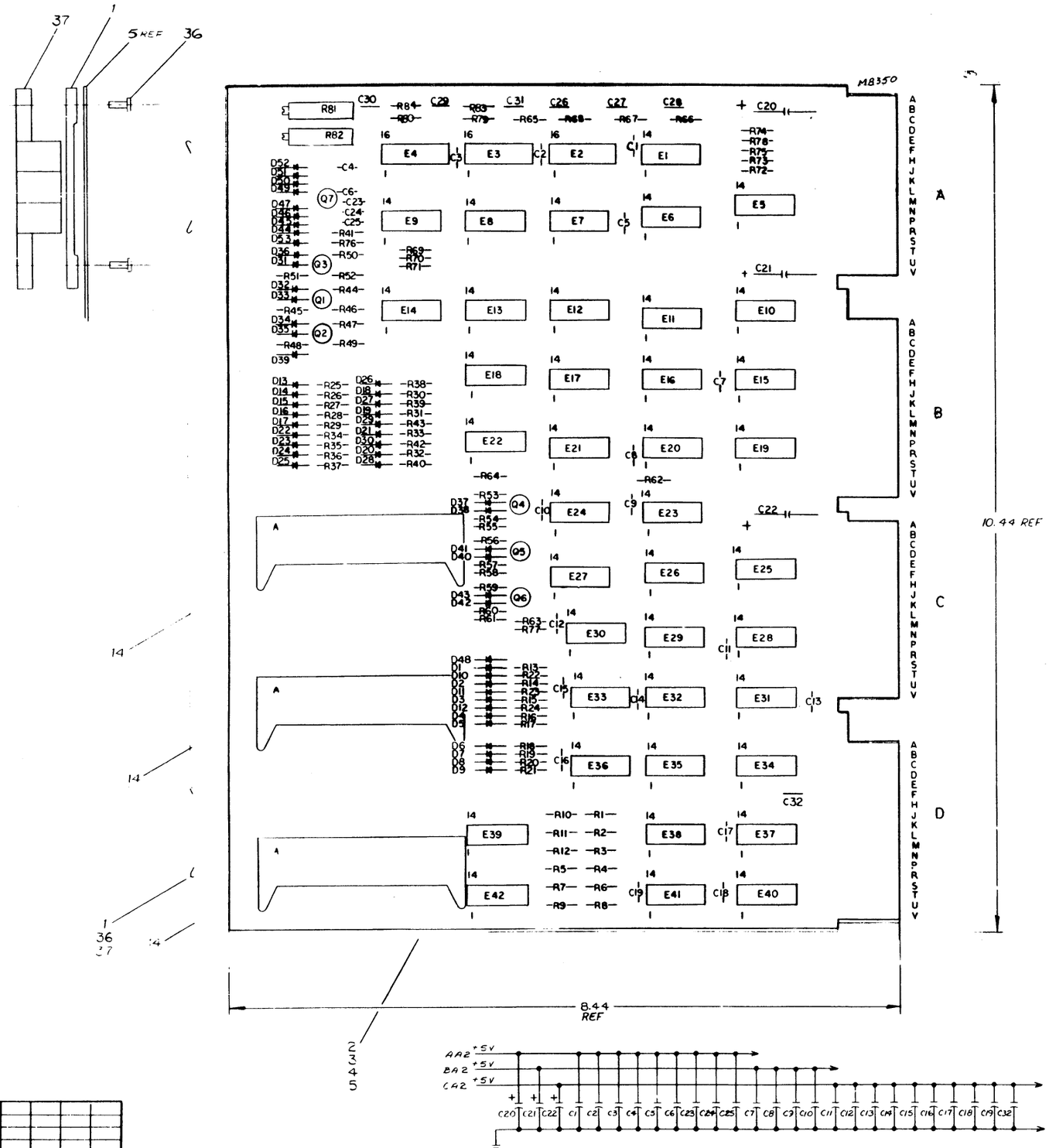
TITLE				
POSITIVE I/O BUS INTERFACE	SHEET 2 OF 2	SIZE A	CODE ML	NUMBER KA8-E	REV. E

DRA 132

DEC 16 (325) 1048 1 N471

NOTES:

1. UNLESS OTHERWISE NOTED,
   CAPACITOR .01 µF 100 V 20%
   RESISTOR 220 1/4 W 5%



QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2	R84, R83	RES 470K 1/4W 5%	1302398	40
1	C29	CAP 33 PF, 100V 5% D.M	1000009	39
A/R		GRIPLET	1210244-0	38
4		HANDLE FLIP CHIP - MAGENTA	9008337-06	37
8		EYELET GS 4-11 STIMPSON	9006750	36
3	E2, E3, E4	IC DEC 74123	1910436	35
2	E23, E42	IC DEC 2501	1910010	34
5	E10, E12, E16, E20, E30	IC DEC 6380	1909971	33
4	E13, E18, E22, E27	IC DEC 7417	1909929	32
5	E14, E17, E21, E33, E36	IC DEC 7416	1909928	31
6	E1, E25, E28, E31, E34, E40	IC DEC 8881	1909705	30
3	E26, E38, E41	IC DEC 7404	1909686	29
4	E15, E32, E35, E37	IC DEC 384	1909486	28
1	E29	IC DEC 7402	1909004	27
1	E39	IC DEC 7430	1905578	26
1	E24	IC DEC 7420	1905577	25
2	E5, E8	IC DEC 7410	1905576	24
1	E11	IC DEC 7400	1905575	23
4	E6, E7, E9, E19	IC DEC 7474	1905547	22
7	Q1 THRU Q7	TRANSISTOR DEC 3009B	1503100	21
2	R81, R82	RES 60K 3/4W 10% 76PR	1309143-13	20
1	R79	RES 4.7 K 1/4 W 5%	1300447	19
4	R65 THRU R68	RES 6.8 K 1/4 W 5%	1301423	18
6	R50, R49, R47, R53, R54, R59	RES 27 1/4 W 10%	1301420	17
1	R80	RES 5.6K 1/4 W. 5%	1301874	16
68	R1 THRU R43, R45, R46, R48, R49, R51, R52, R54, R55, R57, R58, R60, R61 THRU R64, R69 THRU R78	RES 220 1/4 W. 5%	1300271	15
3		HEADER RIGHT ANGLE	1209941	14
43	D1 THRU D43	DIODE D664	1100114	13
10	D44 THRU D53	DIODE D662	1100113	12
23	C1 THRU C19, C23, C24, C25, C32	CAP .01 µF, 100V, 20% DISC	1006160	11
3	C20, C21, C22	CAP 6.8 µF, 35V, 10% S-TANT	1005506	10
1	C30	CAP 150 PF, 100V, 5% D M	1000019	9
2	C27, C28	CAP 68 PF, 100V, 5% D M	1000014	8
~~1~~	~~C29~~	~~CAP 33 PF, 100V, 5% D M~~	~~1000009~~	~~7~~
2	C31, C26	CAP 10 PF, 100V, 5% D M	1000006	6
1		ETCHED CIRCUIT BOARD	5009594	5
REF		MODULE ECO HISTORY	B-MH-M8350-E-4	4
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M8350-E-5	3
REF		X-Y COORDINATE HOLE LOCATION	K-CO-M8350-D-4	2
4		SPACER (CABLE CLAMP)	1202704	1

PARTS LIST

ETCH BOARD REV C

DEC 2501	NONE	NONE
DEC 74123	8	16
DEC 6380	1	8
DEC 384	1	8
IC TYPE	GND.	+5V

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

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

DEC 3009B	2N3009B	
D664	1N3606	
D662	1N645	
DEC NO.	EIA NO	

SEMICONDUCTOR CONVERSION CHART

ORIGINATED A

[redacted] EQUIPMENT CORPORATION

TITLE POSITIVE I/O BUS INTERFACE

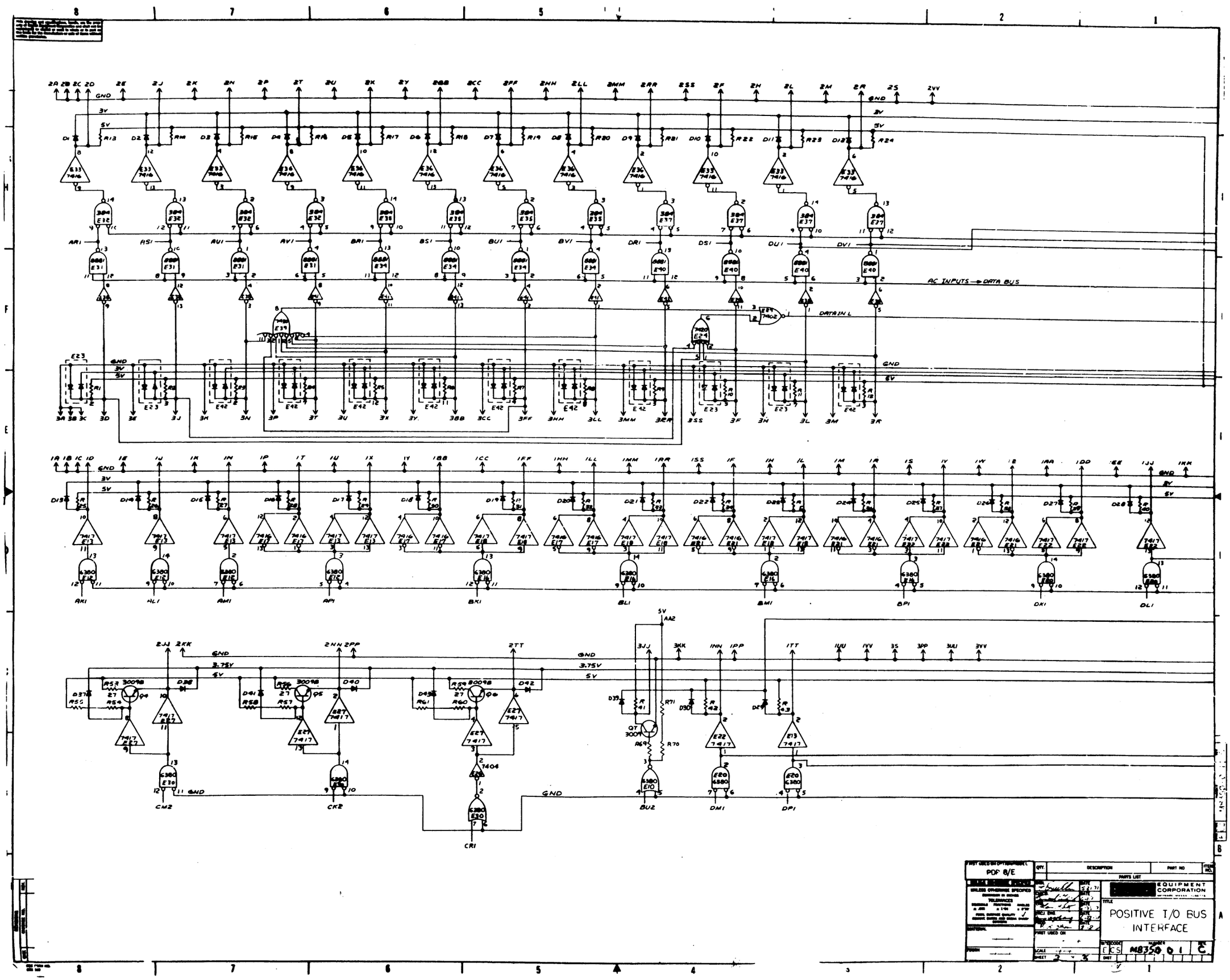
A-DI-KAB-E-0

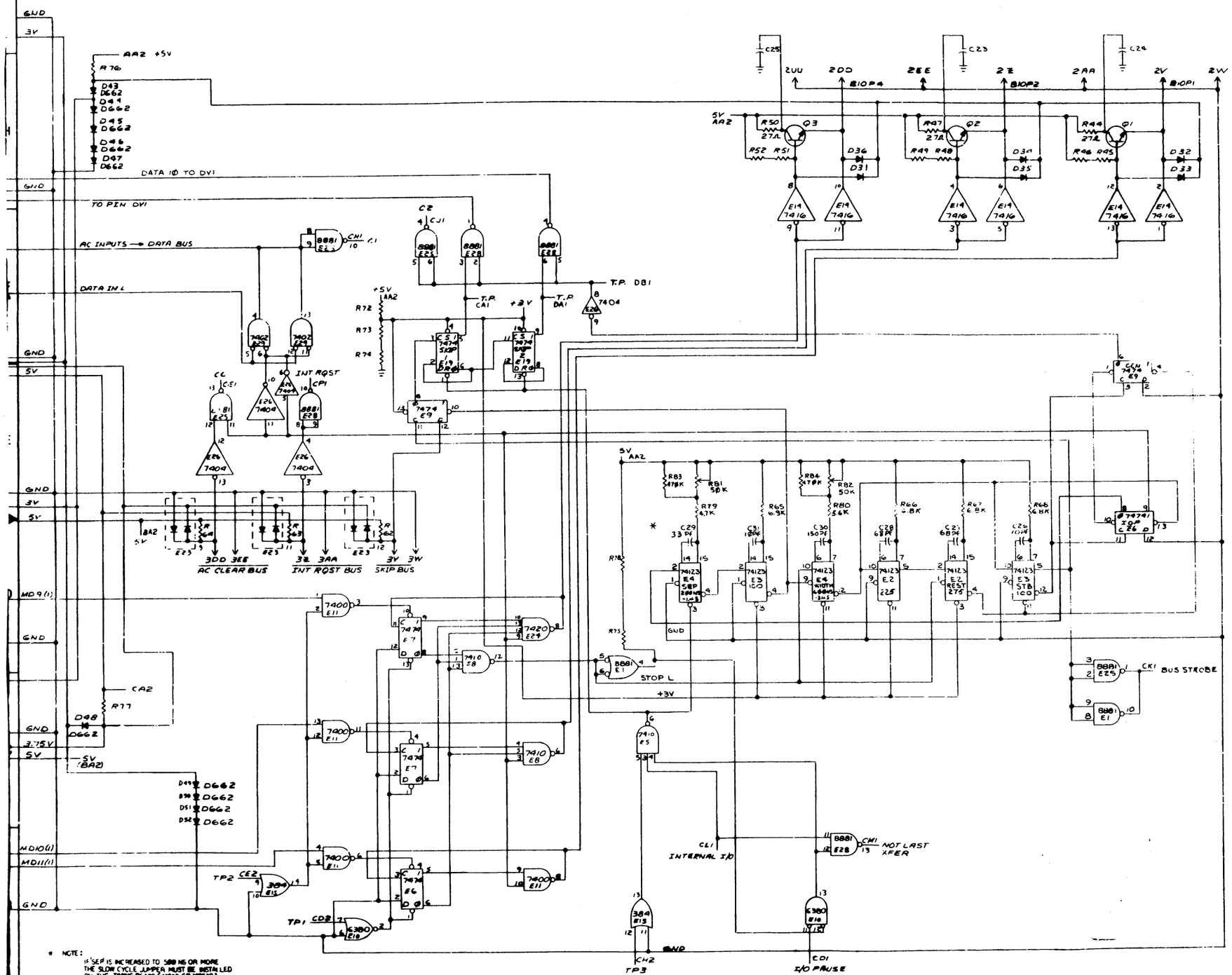
SCALE 2/1 SHEET 1 OF 3

CODE E CS NUMBER M8350-0-1 REV. C

DIST. 1/2/3/4/5

M8350-0-1


AC INPUTS → DATA BUS
DATAIN L
POSITIVE I/O BUS INTERFACE
EQUIPMENT CORPORATION
A8350 0 1
C



QTY	DESCRIPTION	PART NO	ITEM NO.
	PARTS LIST		

UNLESS OTHERWISE SPECIFIED
DIMENSIONS IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 1°30'
FINAL SURFACE QUALITY
MATERIAL
FINISH

DRN Hatch DATE 2-19-71
CHKD DATE
DATE
DATE
DATE 2-26-71
NEXT USED ON
SCALE
SHEET 3 OF 3

[redacted] EQUIPMENT CORPORATION

TITLE POSITIVE I/O BUS INTERFACE

SCHEMATIC E S NUMBER M8550-0-1 REV C

DIST

REVISIONS
REV. CHANGE NO.

MASTER DRAWING LIST

MAINTENANCE MANUALS NO.	TITLE	UNIT VARIATIONS KA8-E
KA8-E	POSITIVE I/O BUS INTERFACE	X

USED ON OPTIONS							
PDP8/E							
PDP8/M							

REVISIONS REV.	DATE	CHG. NO.	APP'D.
A	3/23/71	00001	L.K.
B	7/71	MISC-86	A.V.
C	8/71	KA8E-2	
D	10/71	KA8E-3	AV
E	1/72	8E-00055	for J.C.
F	3/72	KA8E-4	Y.K.
H	4/72	KA8E-5	YK

DRN. K. GULICK	DATE 1/18-71	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. K. GULICK,	DATE 1/18-71	
ENG. L. KLOTZ	DATE 3-5-71	TITLE POSITIVE I/O BUS INTERFACE
PROJ. ENG. R. VOGELSANG	DATE 3-5-71	
PROD. L. SAYLOR	DATE 3-5-71	
FIRST USED ON PDP8/E		
SCALE NONE		SIZE A · CODE ML · NUMBER KA8-E · REV. H
SHEET 1 OF 2		DIST.

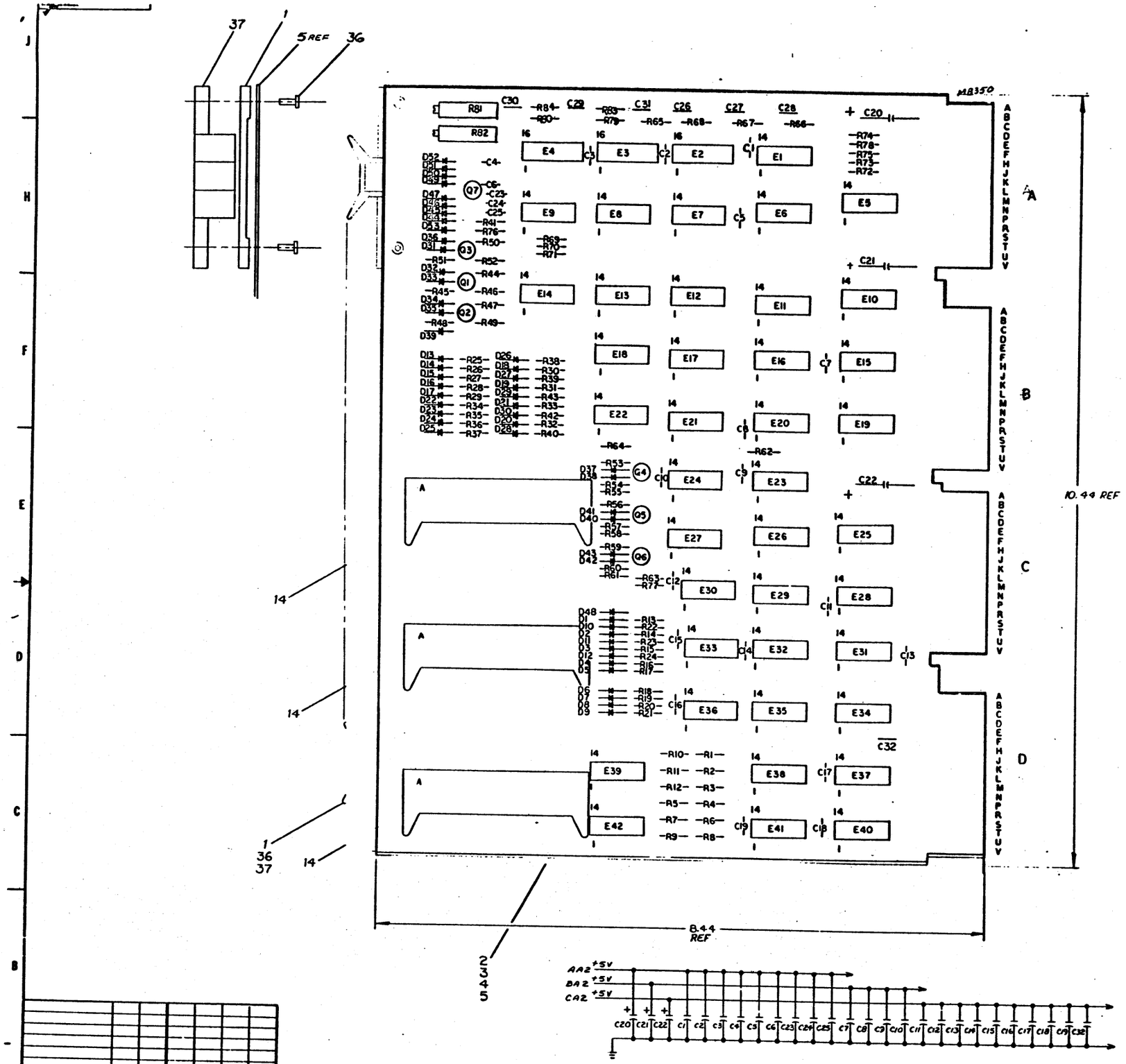
PRINT SET KA8-E	DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE	OPTION NO.
—	A-PL-KA8-E-Ø	A	1	POSITIVE I/O BUS INTERFACE (PARTS LIST)	
X	E-CS-M8350-Ø-1	#	3	POSITIVE I/O BUS INTEFFACE	
—	A-SP-KA8-E-2		2	TEST PROCEDURE	
—	A-SP-KA8-E-3		3	ACCEPTANCE PROCEDURE	
—	A-SP-KA8-E-4		3	ENGINEERING SPECS	
X	A-AL-KA8-E-5		1	ACCESSORY LIST	
X	D-UA-BC08J-0-0	#	1	I/O CABLE (BC08J)	

TITLE				
POSITIVE I/O BUS INTERFACE	SHEET 2 OF 2	SIZE A · CODE ML	NUMBER KA8-E	REV. H

DRA 132
DEC 16-(325)-1048-1-N471

NOTES:

1. UNLESS OTHERWISE NOTED,
   CAPACITOR .01 µF 100V 20%
   RESISTOR 220 1/4W 5%



QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		
		ETCH BOARD REV C		
2	R84, R83	RES 470K 1/4W 5%	1302398	40
1	C29	CAP 33 PF, 100V 5% D.M.	1000009	39
A/R		GRIPLET	1210244-0	38
4		HANDLE FLIP CHIP - MAGENTA	9008337-06	37
8		EYELET GS 4-11 STIMPSON	9006750	36
3	E2, E3, E4	IC DEC 74123	1910436	35
2	E23, E42	IC DEC 2501	1910010	34
5	E10, E12, E16, E20, E30	IC DEC 6380	1909971	33
4	E13, E18, E22, E27	IC DEC 7417	1909929	32
5	E14, E17, E21, E33, E36	IC DEC 7416	1909928	31
6	E1, E25, E28, E31, E34, E40	IC DEC 8881	1909705	30
3	E26, E38, E41	IC DEC 7404	1909686	29
4	E15, E32, E35, E37	IC DEC 384	1909486	28
1	E29	IC DEC 7402	1909004	27
1	E39	IC DEC 7430	1905578	26
1	E24	IC DEC 7420	1905577	25
2	E5, E8	IC DEC 7410	1905576	24
1	E11	IC DEC 7400	1905575	23
4	E6, E7, E9, E19	IC DEC 7474	1905547	22
7	Q1 THRU Q7	TRANSISTOR DEC 3009B	1503100	21
2	RB1, RB2	RES 60K 3/4W 10% T6 PR	1309143-13	20
1	R79	RES 4.7 K 1/4 W 5%	1300447	19
4	R65 THRU R68	RES 6.8 K 1/4 W 5%	1301423	18
6	R50, R49, R47, R53, R56, R59	RES 27 1/4 W 10%	1301420	17
1	R80	RES 5.6K 1/4 W 5%	1301874	16
68	R1 THRU R43, R45, R46, R48, R49, R51, R52, R54 R55, R57, R58, R60, R61 THRU R64, R69 THRU R78	RES 220 1/4 W. 5%	1300271	15
3		HEADER RIGHT ANGLE	1209991	14
43	D1 THRU D43	DIODE D664	1100114	13
10	D44 THRU D53	DIODE D662	1100113	12
23	C1 THRU C19, C23 C24, C25, C32	CAP .01 µf, 100V, 20% DISC	1001610	11
3	C20, C21, C22	CAP 6.8 µf, 35V, 10% S-TANT	1005306	10
1	C30	CAP 150PF, 100V, 5% DM	1000019	9
1	C28	CAP 68 PF, 100V, 5% DM	1000014	8
1	C27	CAP 82 PF, 100V, 5%	1000015	7
2	C31, C26	CAP 10 PF, 100V, 5% DM	1000006	6
1		ETCHED CIRCUIT BOARD	5009594	5
REF		MODULE ECO HISTORY	B-MH-MB350-B-6	4
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-MB350-B-5	3
REF		X-Y COORDINATE HOLE LOCATION	K-CD-MB350-D-4	2
4		SPACER (CABLE CLAMP)	1202704	1

DEC NO.	EIA NO	DEC NO	EIA NO
DEC 3009B		2N3009B	
D664		1N3606	
D662		1N695	

SEMICONDUCTOR CONVERSION CHART

	NONE	NONE
DEC 2501	NONE	NONE
DEC 74123	8	16
DEC 6380	1	8
DEC 384	1	8
IC TYPE	GND	+5V

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

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

ORIGINATED

EQUIPMENT CORPORATION

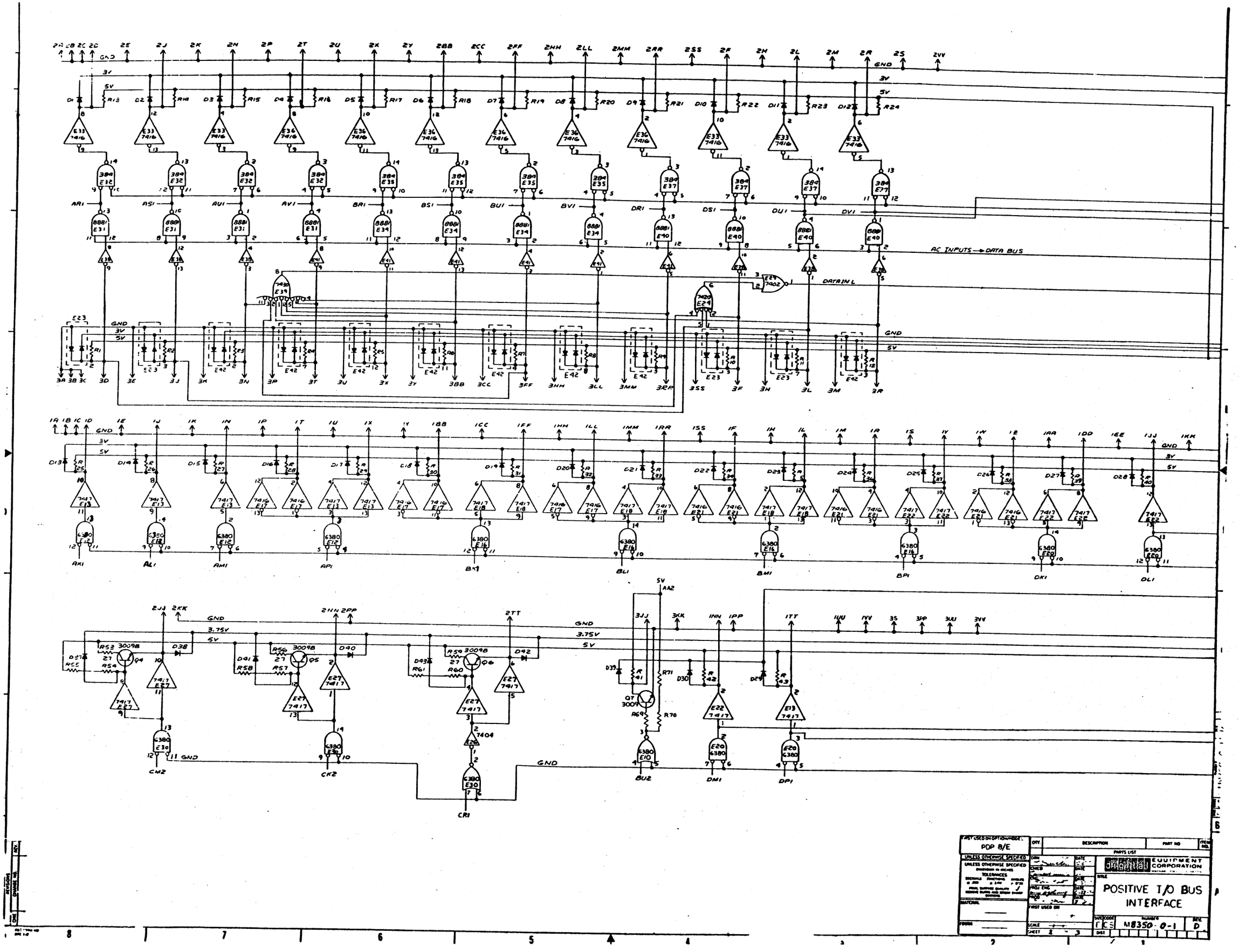
TITLE: POSITIVE I.O BUS INTERFACE

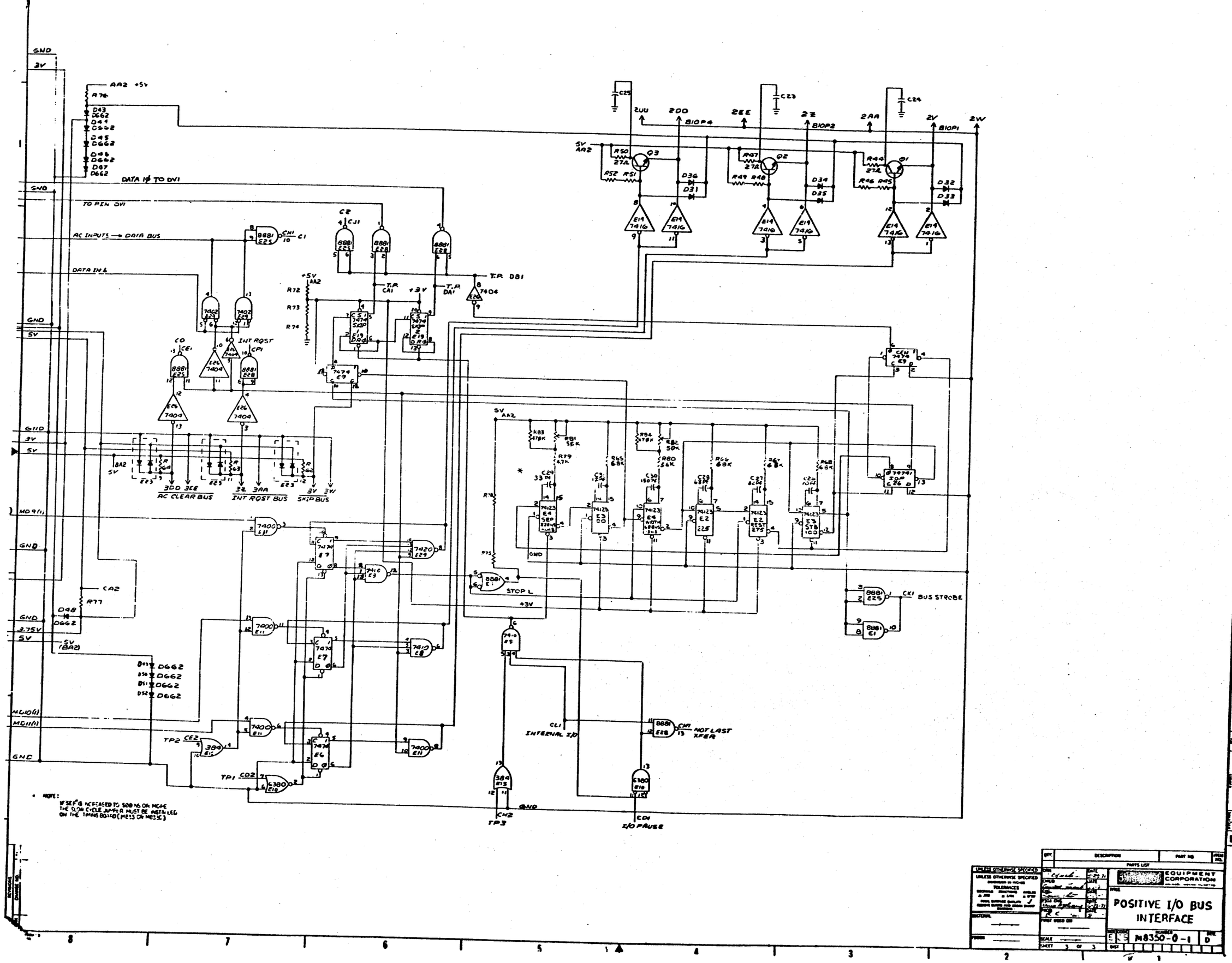
A-PL-KAR E-0

SCALE 2:1

SHEET 1 OF 3

ECS MB350-0-1 D


AC INPUTS → DATA BUS
DATAIN L
PDP 8/E
UNLESS OTHERWISE SPECIFIED
TOLERANCES
MATERIAL
FINISH
SCALE
SHEET 2 OF 3
DIGITAL EQUIPMENT CORPORATION
TITLE
POSITIVE I/O BUS INTERFACE
SIZE CODE
FCS
NUMBER
M8350-0-1
REV
D


GND
3V
5V
AA2 +5V
DATA 1Ø TO DV1
TO PIN DV1
AC INPUTS → DATA BUS
DATA IN L
INT RQST
AC CLEAR BUS
INT RQST BUS
SKIP BUS
MD9(1)
MD10(1)
MD11(1)
2.75V
STOP L
+3V
T.P. DB1
T.P. CA1
T.P. DA1
BIOP4
BIOP2
BIOP1
BUS STROBE
NOT LAST XFER
INTERNAL I/O
I/O PAUSE
TP3
TP2
TP1
NOTE:
IF SEP IS INCREASED TO 500 NS OR MORE THE SLOW CYCLE JUMPER MUST BE INSTALLED ON THE TIMING BOARD (M833 OR M833C)
UNLESS OTHERWISE SPECIFIED
TOLERANCES
PARTS LIST
DESCRIPTION
PART NO
EQUIPMENT CORPORATION
POSITIVE I/O BUS INTERFACE
M8350-0-1
D
SHEET 3 OF 3