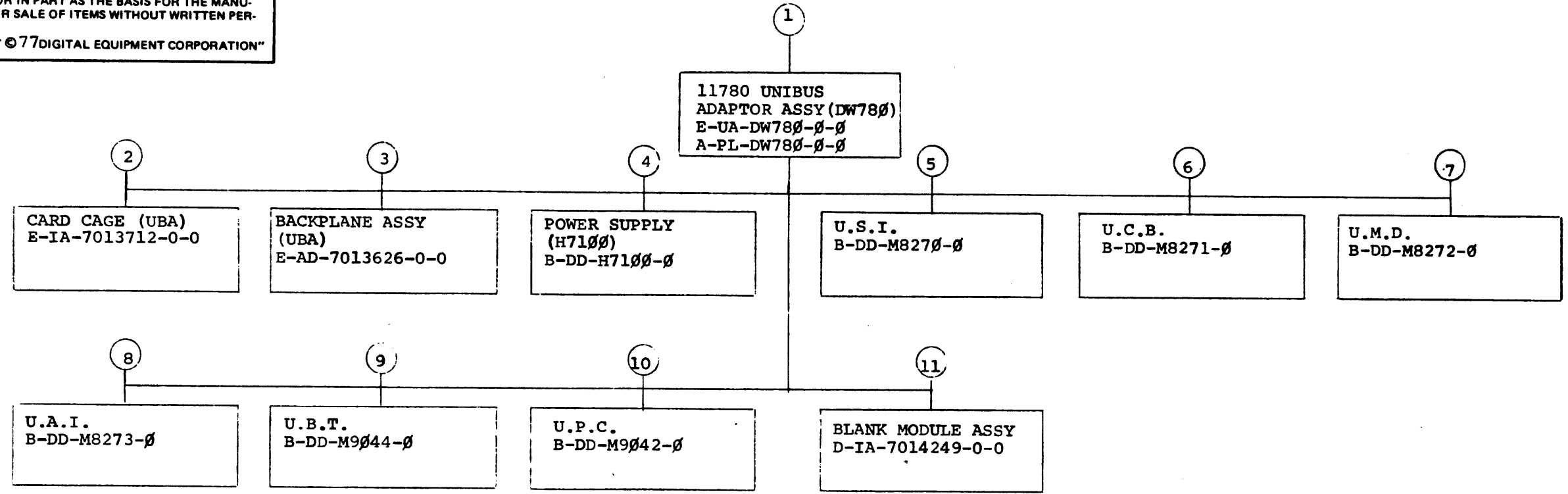


"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 77 DIGITAL EQUIPMENT CORPORATION"



TITLE	SIZE CODE	NUMBER	REV
11780 UNIBUS ADAPTOR ASSY (DW780)	B DD	DW780-0	C
SHEET 2 OF 3			

TW

FIND NO.	DRAWING NO.	DESCRIPTION	TYPE	FIND NO.	DRAWING NO.	DESCRIPTION	TYPE
1	MP00497	11780 UNIBUS ADAPTOR ASSY (DW780) (MP)	-				
	B-TC-DW780-0-1	11780 UNIBUS ADAPTOR ASSY (DW780) (TC)	-		A-WT-7013626-0	AWT REV. STATUS	F
	E-UA-DW780-0-0	11780 UNIBUS ADAPTOR ASSY (DW780)	E/M				
	A-PL-DW780-0-0	11780 UNIBUS ADAPTOR ASSY (DW780) (PL)	E/M				
	B-MD-7418902-0-0	PLATE STUD	M				
	B-MD-7418903-0-0	"U" BAR	M				
	B-MD-7419084-0-0	PLATE, HOLDING	M	4	B-DD-H7100-0	POWER SUPPLY (H7100)	E/M
	B-MD-7419485-0-0	COVER, BUS BAR	M				
	D-IC-11780-0-1	11780 SYSTEM POWER DIAGRAM	E/M				
	D-IC-11780-0-2	11780 SYSTEM INTERCONNECT DIAGRAM	E/M				
	D-IC-11780-0-3	11780 SUB SYSTEM INTERCONNECT	E/M				
	D-MU-DW780-0-2	DW780 MODULE UTILIZATION (UBA)	E	5	B-DD-M8270-0	U.S.I.	E/M
	D-IA-7014249-0-0	CABLE, POWER (BLACK)	E/M				
	D-IA-7014530-0-0	CABLE, POWER (RED)	E/M				
	D-IA-7014212-0-0	CABLE, AC, DC LO	E/M				
	C-MD-7419457-0-0	COVER, U.B.A. BACKPLANE	M	6	B-DD-M8271-0	U.C.B.	E/M
	D-IA-1700087-00	CABLE, COAX RIBBON	E/M				
	C-IA-7013622-0-0	CABLE, UNIBUS (BC05L)	E/M				
	D-IA-7014213-0K	CABLE, OVER TEMP	E/M				
				7	B-DD-M8272-0	U.M.D.	E/M
2	E-IA-7013712-0-0	CARD CAGE (UBA)	M				
	C-MD-7417930-0-0	MOUNTING BAR VERTICAL	M				
	C-MD-7417966-0-0	BRACKET BOTTOM REAR	M	8	B-DD-M8273-0	U.A.I.	E/M
	B-MD-7417963-0-0	BRACKET CARD GUIDE	M				
	C-MD-7417967-0-0	BRACKET BOTTOM CARD GUIDE	M				
	C-MD-7417964-0-0	BRACKET TOP CARD GUIDE	M				
	C-MD-7417942-0-0	HANDLE	M				
	C-MD-7417965-0-0	BRACKET TOP REAR	M	9	B-DD-M9044-0	U.B.T.	E/M
	C-MD-7418194-0-0	STIFFENER	M				
	C-MD-7418181-0-0	STIFFENER, CORNER	M				
				10	B-DD-M9042-0	U.P.C.	E/M
3	E-IA-7013626-0-0	BACKPLANE ASSY (UBA)	E/M				
	E-MD-5012979-0-0	BOARD, DRILL AND ETCH	M				
	C-MD-7417866-0-0	BAR, MOUNTING	M				
	D-PS-1214348-0-0	BUS BAR	M	11	D-IA-7014103-0-0	BLANK MODULE ASSY	M
	B-MD-7419254-0-0	REWORK, CONN. BLOCK	M		E-MD-7418172-0-0	BLANK MODULE	M
	C-MD-7411399-0-0	STRIP, FIBERGLASS	M				
	A-DC-7411881-0-0	DECAL AWT REV. STATUS	M				
	B-MD-7417973-0-0	BLOCK, SPACER	M				
	K-WL-7013626-0-1	WIRE LIST (UBA)	E				

TYPE: E ELECTRICAL
M MECHANICAL
E/M ELECTRO/MECHANICAL

digital

TITLE
11780 UNIBUS ADAPTOR ASSY (DW780)

SHEET 3 OF 3

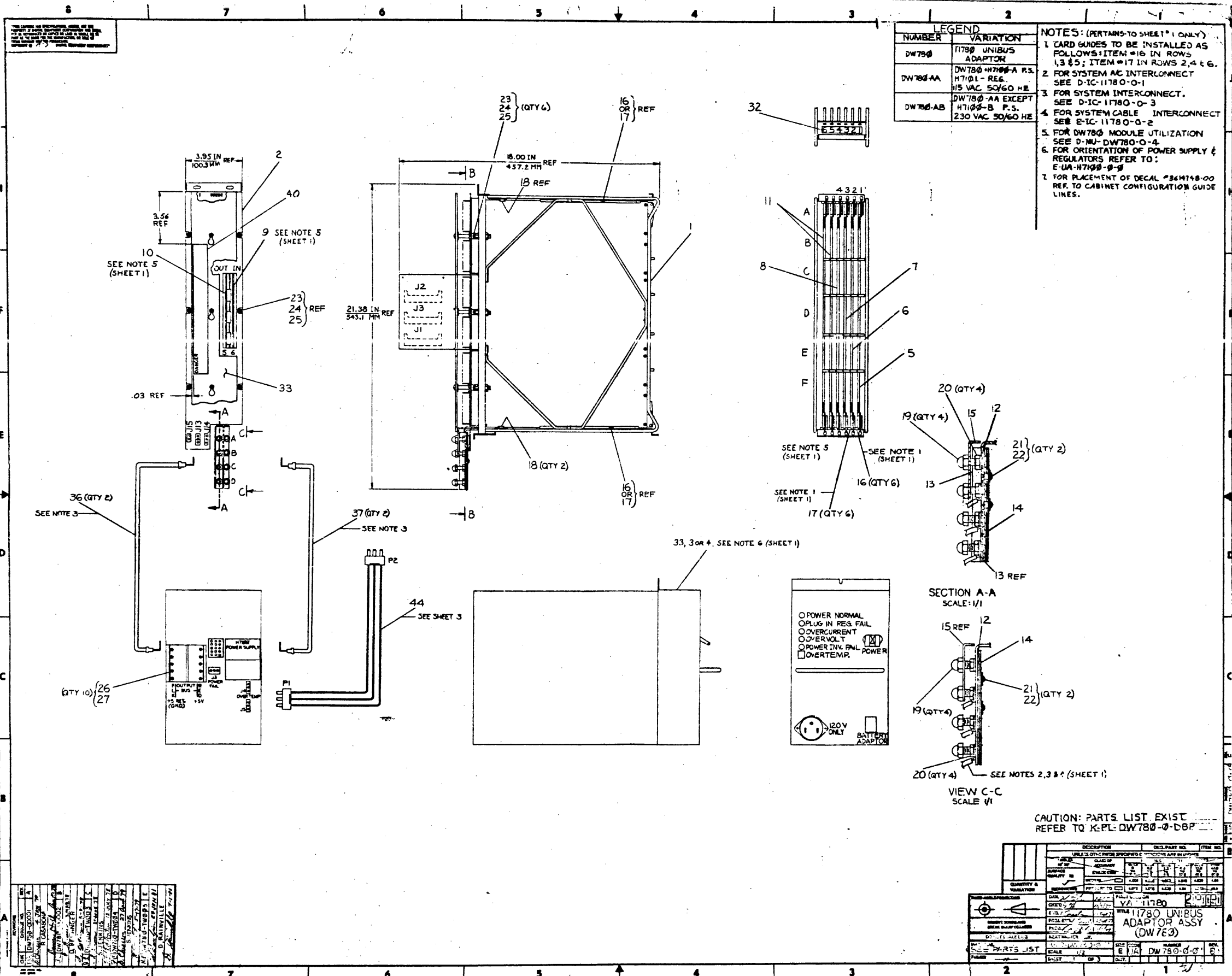
SIZE CODE
B DD

NUMBER
DW780-0

REV
C

DRB 108A

TW



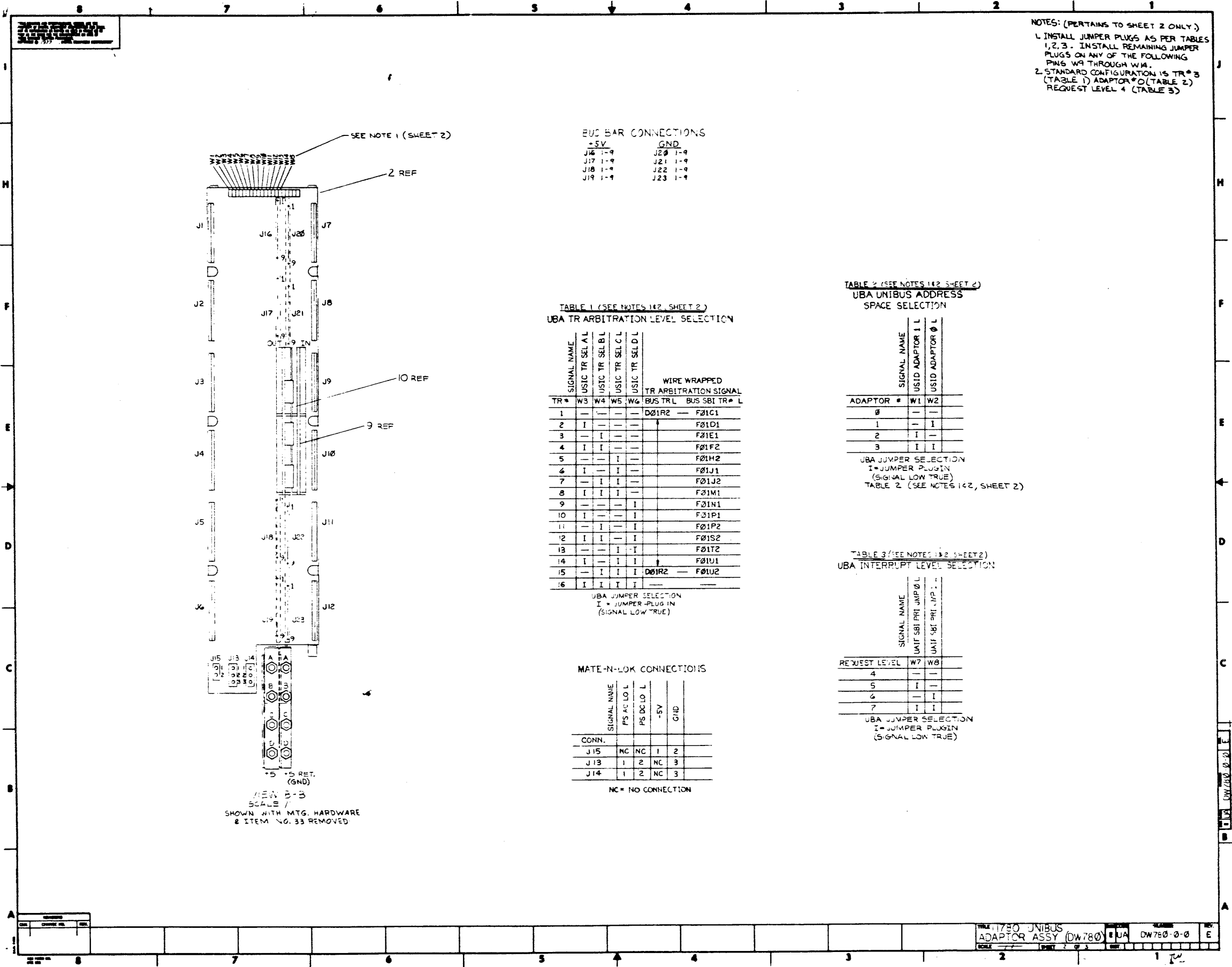
NUMBER	VARIATION
DW780	11780 UNIBUS ADAPTOR
DW780-AA	DW780-H7100-A P.S. H7101-REG. H5 VAC 50/60 HE
DW780-AB	DW780-AA EXCEPT H7100-B P.S. 230 VAC 50/60 HE

- NOTES: (PERTAINS TO SHEET 1 ONLY)
- CARD GUIDES TO BE INSTALLED AS FOLLOWS: ITEM #16 IN ROWS 1,3 & 5; ITEM #17 IN ROWS 2,4 & 6.
 - FOR SYSTEM AC INTERCONNECT SEE D-1C-11780-0-1
 - FOR SYSTEM INTERCONNECT SEE D-1C-11780-0-3
 - FOR SYSTEM CABLE INTERCONNECT SEE E-1C-11780-0-2
 - FOR DW780 MODULE UTILIZATION SEE D-MU-DW780-0-4
 - FOR ORIENTATION OF POWER SUPPLY & REGULATORS REFER TO: E-1A-H7100-0-0
 - FOR PLACEMENT OF DECAL #344148-00 REF. TO CABINET CONFIGURATION GUIDE LINES.

REV	DATE	BY	CHKD	DESCRIPTION
1	11/27/79
2
3
4
5
6
7

QUANTITY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION
1
...
...

CAUTION: PARTS LIST EXIST REFER TO K-PL: QW780-0-DBP



NOTES: (PERTAINS TO SHEET 2 ONLY.)
 1. INSTALL JUMPER PLUGS AS PER TABLES 1, 2, 3. INSTALL REMAINING JUMPER PLUGS ON ANY OF THE FOLLOWING PINS W9 THROUGH W14.
 2. STANDARD CONFIGURATION IS TR#3 (TABLE 1) ADAPTOR #0 (TABLE 2) REQUEST LEVEL 4 (TABLE 3)

BUS BAR CONNECTIONS

+5V	GND
J16 1-9	J20 1-9
J17 1-9	J21 1-9
J18 1-9	J22 1-9
J19 1-9	J23 1-9

TABLE 1 (SEE NOTES 1 & 2, SHEET 2)
UBA TR ARBITRATION LEVEL SELECTION

TR #	SIGNAL NAME					WIRE WRAPPED TR ARBITRATION SIGNAL	
	W3	W4	W5	W6	W7	W8	W9
1	-	-	-	-	-	D01R2	F01C1
2	I	-	-	-	-	-	F01D1
3	-	I	-	-	-	-	F01E1
4	I	I	-	-	-	-	F01F2
5	-	-	I	-	-	-	F01H2
6	I	-	I	-	-	-	F01J1
7	-	I	I	-	-	-	F01J2
8	I	I	I	-	-	-	F01M1
9	-	-	-	I	-	-	F01N1
10	I	-	-	I	-	-	F01P1
11	-	I	-	I	-	-	F01P2
12	I	I	-	I	-	-	F01S2
13	-	-	I	I	-	-	F01T2
14	I	-	I	I	-	-	F01U1
15	-	I	I	I	D01R2	-	F01U2
16	I	I	I	I	-	-	-

UBA JUMPER SELECTION
 I = JUMPER PLUG IN
 (SIGNAL LOW TRUE)

MATE-N-LOK CONNECTIONS

CONN.	SIGNAL NAME			-5V	GND
	PS AC	PS DC	LO L		
J15	NC	NC	1	2	
J13	1	2	NC	3	
J14	1	2	NC	3	

NC = NO CONNECTION

TABLE 2 (SEE NOTES 1 & 2, SHEET 2)
UBA UNIBUS ADDRESS SPACE SELECTION

ADAPTOR #	SIGNAL NAME	
	W1	W2
0	-	-
1	-	I
2	I	-
3	I	I

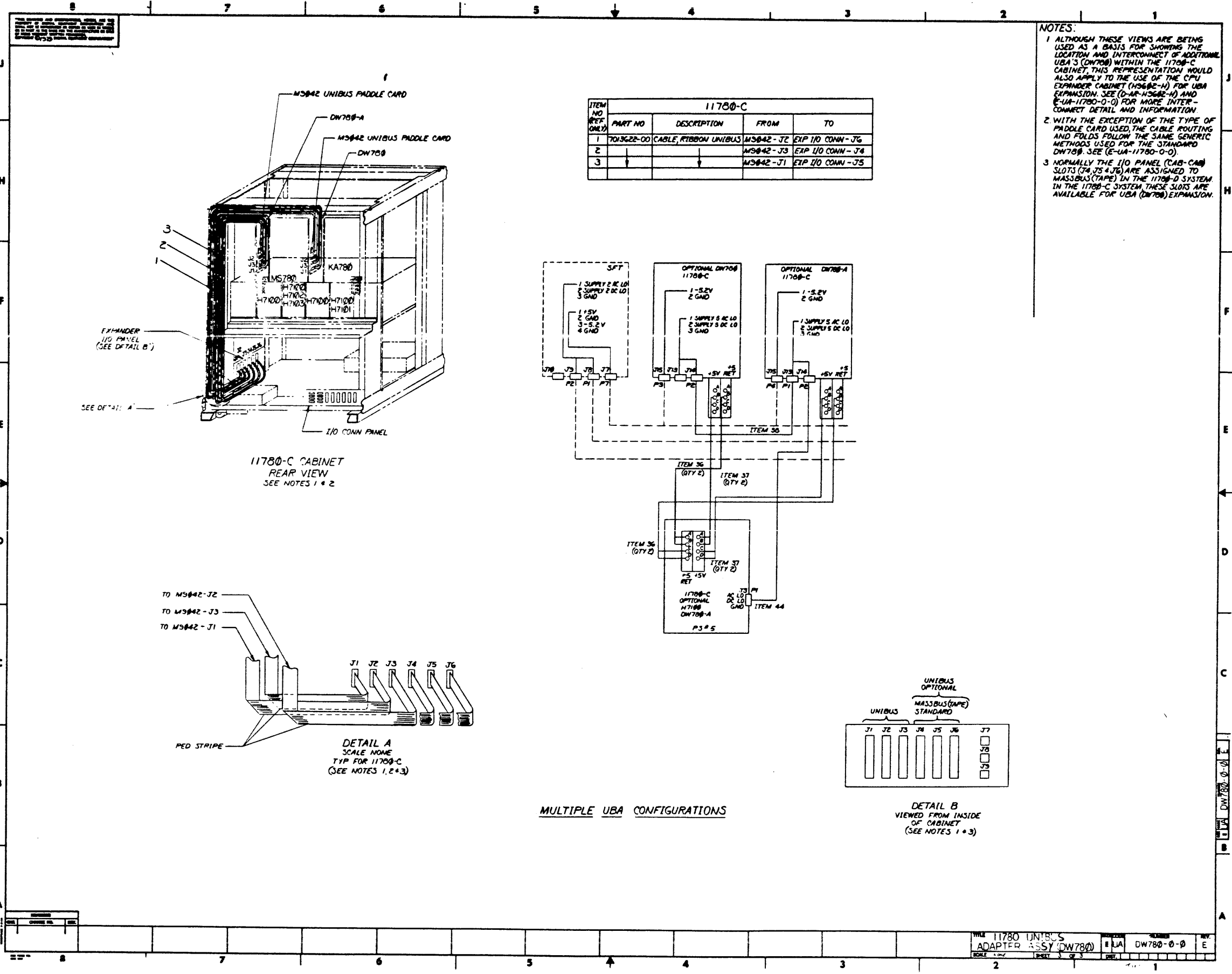
UBA JUMPER SELECTION
 I = JUMPER PLUG IN
 (SIGNAL LOW TRUE)
 TABLE 2 (SEE NOTES 1 & 2, SHEET 2)

TABLE 3 (SEE NOTES 1 & 2, SHEET 2)
UBA INTERRUPT LEVEL SELECTION

REQUEST LEVEL	SIGNAL NAME	
	W7	W8
4	-	-
5	I	-
6	-	I
7	I	I

UBA JUMPER SELECTION
 I = JUMPER PLUG IN
 (SIGNAL LOW TRUE)

NEW B-3
 SCALE /
 SHOWN WITH MTG. HARDWARE
 & ITEM NO. 33 REMOVED

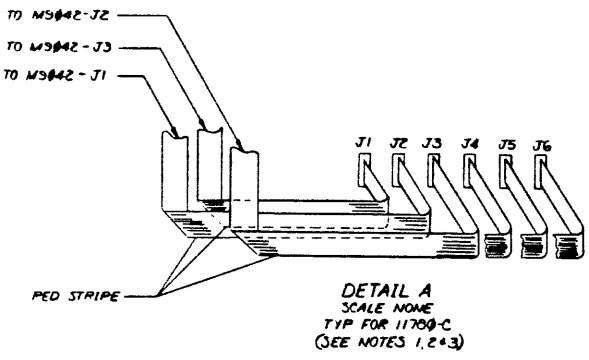


11780-C				
ITEM NO	PART NO	DESCRIPTION	FROM	TO
1	7013622-00	CABLE, RIBBON UNIBUS	MS842-J2	EXP I/O CONN-J6
2			MS842-J3	EXP I/O CONN-J4
3			MS842-J1	EXP I/O CONN-J5

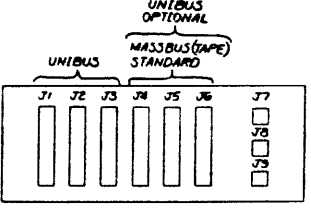
NOTES:

- ALTHOUGH THESE VIEWS ARE BEING USED AS A BASIS FOR SHOWING THE LOCATION AND INTERCONNECT OF ADDITIONAL UBA'S (DW780) WITHIN THE 11780-C CABINET, THIS REPRESENTATION WOULD ALSO APPLY TO THE USE OF THE CPU EXPANDER CABINET (HS682-H) FOR UBA EXPANSION. SEE (D-48-115682-H) AND E-UA-11780-0-0 FOR MORE INTERCONNECT DETAIL AND INFORMATION.
- WITH THE EXCEPTION OF THE TYPE OF PADDLE CARD USED, THE CABLE ROUTING AND FOLDS FOLLOW THE SAME GENERIC METHODS USED FOR THE STANDARD DW780. SEE (E-UA-11780-0-0).
- NORMALLY THE I/O PANEL (CAB-CAM) SLOTS (J4, J5, J6) ARE ASSIGNED TO MASSBUS (TAPE) IN THE 11780-D SYSTEM. IN THE 11780-C SYSTEM THESE SLOTS ARE AVAILABLE FOR UBA (DW780) EXPANSION.

11780-C CABINET
REAR VIEW
SEE NOTES 1 & 2



MULTIPLE UBA CONFIGURATIONS



LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION		
					00	AA	AB
1	1	E-IA-7013712-0-0	7013712-00	CARD CAGE MBA/UBA	1	1	1
2	2	E-IA-7013626-0-0	7013626-00	BACKPLANE ASSY (UBA)	1	1	1
3	3	E-UA-H7100-0-0	H7100-A	11780 500 WATT SUPPLY: 5V 100A,1	0	1	0
4	4	E-UA-H7100-0-0	H7100-B	11780 500-WATT SUPPLY: 5V 100A,2	0	0	1
5	5	D-UA-M8270-0-0	M8270-00	YSI SBI INTERFACE	1	1	1
6	6	E-UA-M8271-0-0	M8271-00	YMD UNIBUS MAP AND DATA PATH	1	1	1
7	7	D-UA-M8272-0-0	M8272-00	UNIBUS ADAPTER ADDRESS	1	1	1
8	8	E-UA-M8273-0-0	M8273-00	UNIBUS ADAPTER CONTROL	1	1	1
9	9	D-UA-M9044-0-0	M9044-00	UBA UNIBUS TERMINAL	1	1	1
10	10	D-UA-M9042-0-0	M9042-00	UNIBUS PADDLE CARD	1	1	1
11	11	D-IA-7014103-0-0	7014103-00	BLANK MODULE ASSY	2	2	2
12	12	B-MD-7418902-0-0	7418902-00	STUD PLATE BUS BAR ADAPTER	2	2	2
13	13	B-MD-7418903-0-0	7418903-00	U-BAR	1	1	1
14	14	B-MD-7419084-0-0	7419084-00	PLATE, HOLDING	2	2	2
15	15	B-MD-7419485-0-0	7419485-00	COVER, BUS BAR MEMORY	1	1	1
16	16		1212405-00	CARD GUIDE,NYLON	6	6	6
17	17		1212405-01	CARD GUIDE,NYLON	6	6	6
18	18		1211630-00	CARD GUIDE	2	2	2
19	19		9006610-00	NUT,CAP , 10-32 X7/16AF REL	8	8	8
20	20		9006565-00	NUT,KEP , 10-32X 3/8 AF	8	8	8
21	21		9008032-01	SCREW,PAN,PHIL 4-40X 3/16 SS	4	4	4
22	22		9006655-00	WASHER, FLAT, .312 O.D. X .125 I	4	4	4
23	23		9006043-01	SCREW,PAN,PHIL 8-32X1 SS	6	6	6
24	24		9006660-00	WASHER, FLAT, .375 O.D. X .187 I	6	6	6
25	25		9006563-00	NUT,KEP , 8-32 X11/32AF	6	6	6
26	26		9006073-01	SCREW,PAN,PHIL 10-32X 1/2 SS	10	10	10
27	27		9007906-00	WASHER, LOCK S.S. #10	10	10	10
28	28	D-IC-11780-0-3		11780 SUB SYSTEM INTERCONNECT	REF	REF	REF
29	29	D-IC-11780-0-2		11780 SYSTEM INTERCONNECT DIAGRA	REF	REF	REF
30	30	D-IC-11780-0-1		11780 SYSTEM POWER DIAGRAM	REF	REF	REF

REVISION HISTORY			BASIC PART NO: DW780	DRN:	H. DARAKJIAN	DATE: 24-JUN-81	D I G I T A L				
ENG	ECD NUMBER	REV	SECTION A OF A	CHK'D:	H. DARAKJIAN	DATE: 24-JUN-81	TITLE PARTS LIST				
---	INITIAL	--	SECTION. VARIATION INDEX	CHK'D:	H. DARAKJIAN	DATE: 24-JUN-81	11780 UNBS ADPT ASSY (DW780)				
DR	DW780-TW005	E	[A] 00,AA,AB	DES.ENG.:	D. RAINVILLE	DATE: 24-JUN-81	DOCUMENT NUMBER				
			[B]	RESP.ENG.:	D. RAINVILLE	DATE: 24-JUN-81	SIZE	CODE	NUMBER	REV	
			[C]	MFG.ENG.:	B. CARLEY	DATE: 24-JUN-81	K	PL	DW780-0-DRP	E	
			[D]	ASSEMBLY NUMBER:		TOP DOCUMENT NUMBER:	FILE NAME:		EDIT #		
			[E]	E-UA-DW780-0-0		B-DD-DW780-0-0	Z2608.PLS		6		

*THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1981. DIGITAL EQUIPMENT CORPORATION *

TW

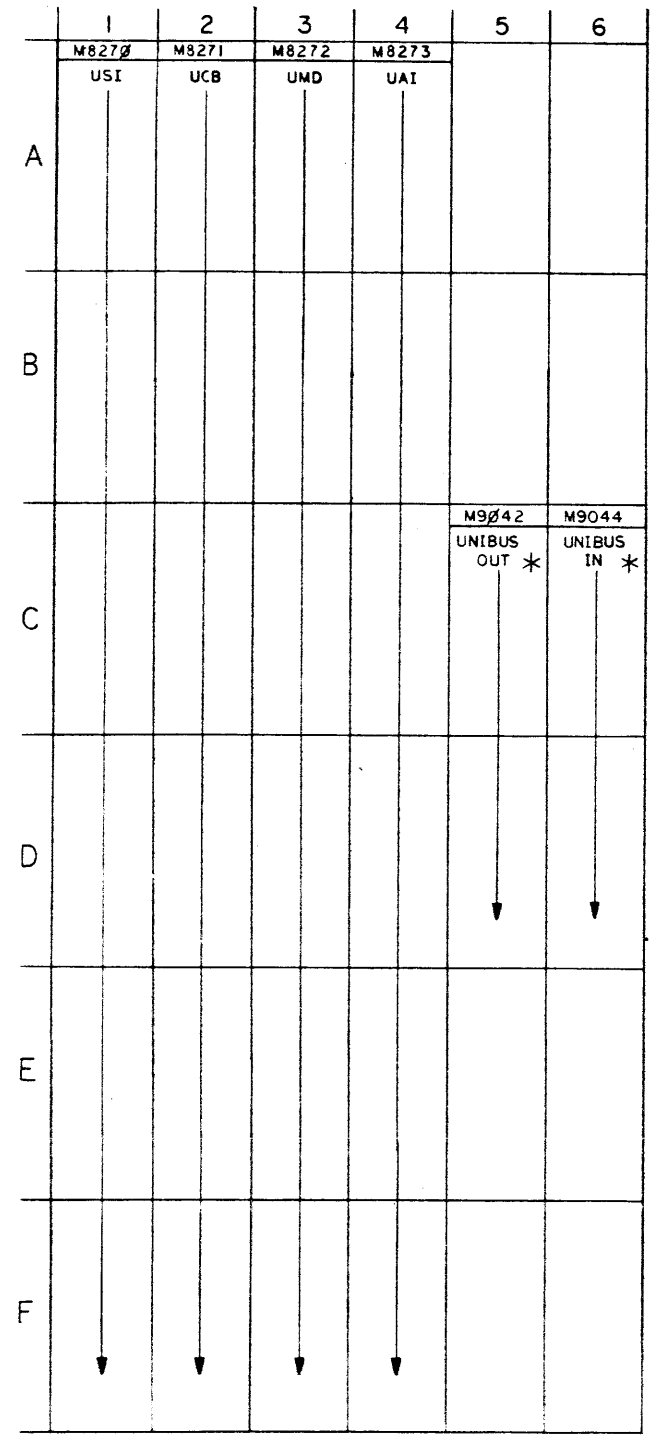
LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION		
					00	AA	AB
31	31	D-MU-DW780-0-2		DW780 MODULE UTILIZATION	REF	REF	REF
32	32		3613281-03	LABEL,ADHESIVE BACK FOR BA11-K	2	2	2
33	33	C-MD-7419457-0-0	7419457-00	COVER, U.B.A. BACKPLANE	1	1	1
34	34		1700087-00	CABLE,RIBBON,20 COND. ASSY FLAT	6	6	6
35	35		7013622-00	UNIBUS CABLE	3	3	3
36	36	D-IA-7014249-0-0	7014249-1A	POWER CABLE, BLACK	2	2	2
37	37	D-IA-7014530-0-0	7014530-1A	CABLE PCWER RED	2	2	2
38	38	D-IA-7014212-0-0	7014212-0H	CABLE AC,DC,LOW	1	0	0
39	39		1214314-00	CONN 2POS JUMPER	8	8	8
40	40		3615087-02	LABEL,"DANGER-HIGH CURRENT"	1	1	1
41	41		7014213-0K	CAB OVER TEMP	0	1	1
42	42		9009642-00	SCREW,PAN,PHIL,SEMS 8-32X .25 L	4	5	5
43	43		3614748-00	LABEL,ADHESIVE BACK FOR DW770	1	1	1
44	44	D-IA-7014212-0-0	7014212-0M	CABLE AC,DC,LOW	0	1	1
45	45	D-UA-M9014-0-0	M9014-00	ADAPTOR BOARD	0	1	1
46	46	D-CS-M9302-0-1		UNIBUS TERMINATOR	0	1	1
47	47	D-AD-7014246-0-0	7014246-15	INTERNAL UNIBUS CABLE ASSY.	0	1	1

! D ! I ! G ! I ! T ! A ! L !	! T I T L E	! 11780 UNBS ADPT ASSY (DW780)	! S E C T I O N A O F A	! S I Z E ! C O D E !	! D O C U M E N T N U M B E R	! R E V !
				! K ! P L !	! DW780-0-DBP	! E !

TW

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION

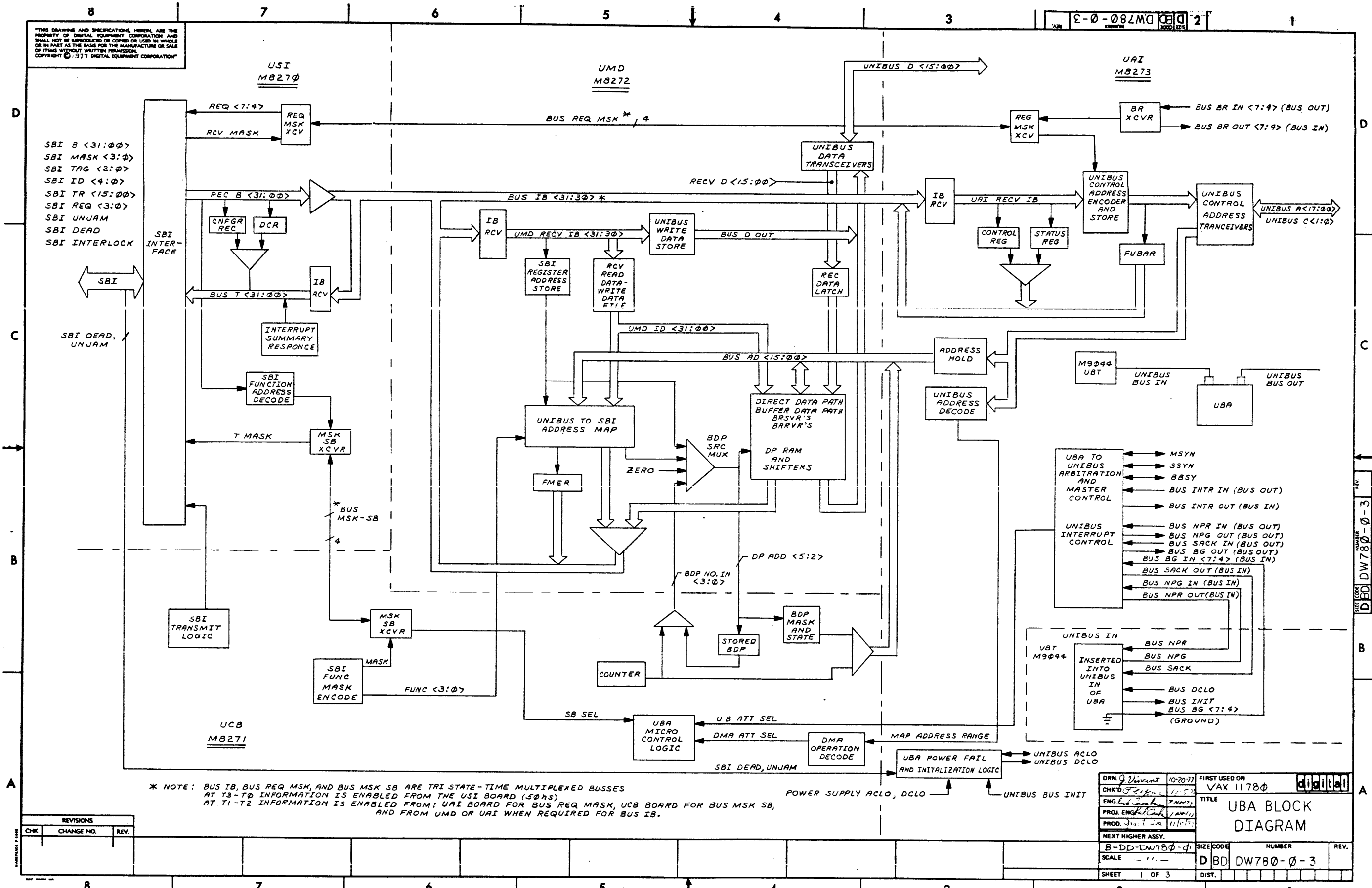
NOTE:
 * MODULES PLUG IN FROM PIN SIDE



REV.	
CHG.	
REVISIONS	
CHANGE NO.	

DRN. AFM	10-222	FIRST USED ON	VAX 11780	Digital
CHK'D	10-182	TITLE	MODULE UTILIZATION	
ENG.	10-182	UNIBUS ADAPTOR		
PROJ. ENG.	10-182			
PROD.	11-177			
NEXT HIGHER ASSY.				
SCALE	1	SIZE CODE	D MU	NUMBER
SHEET	1 OF 1	DIST.	DW780-0-2	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

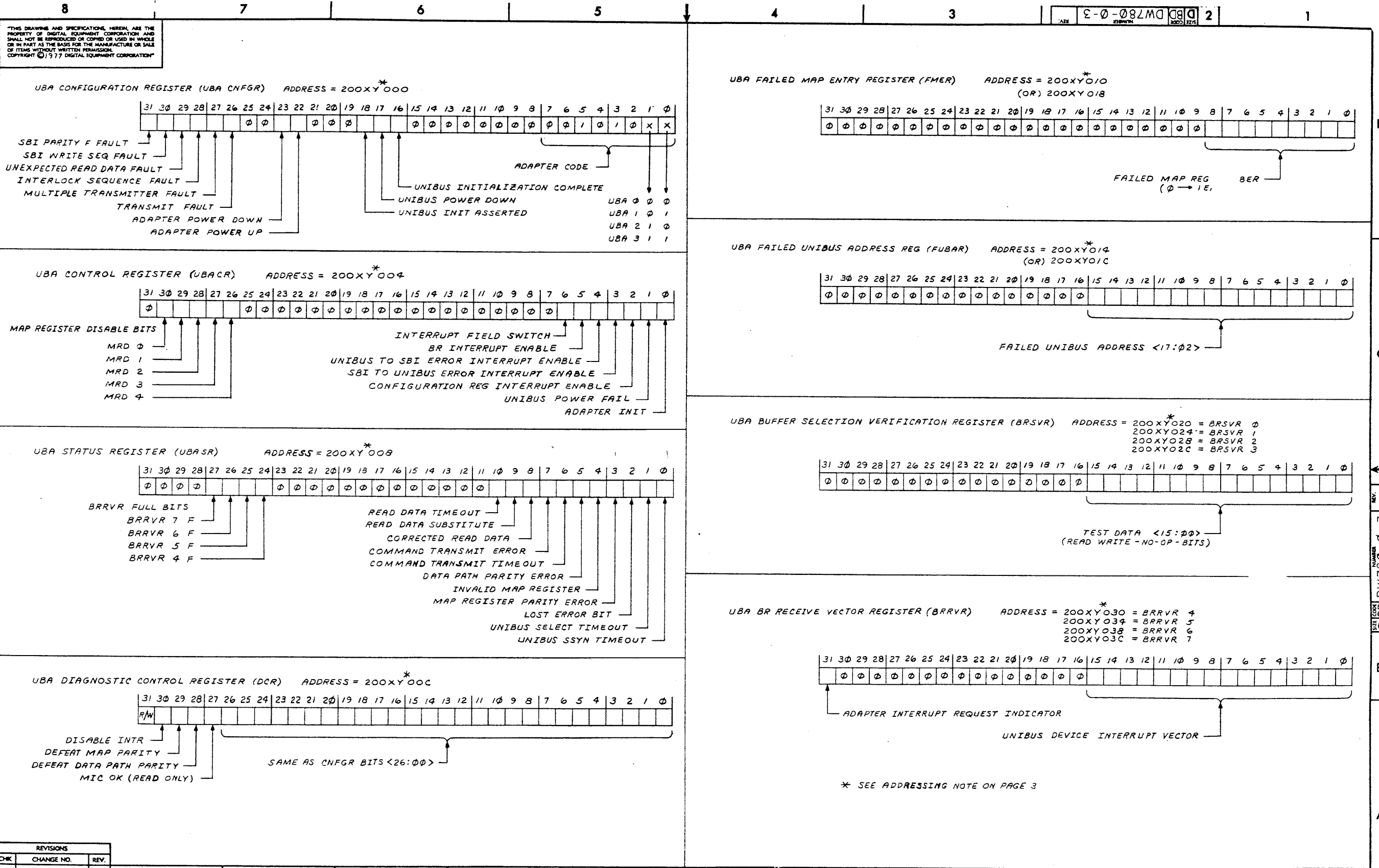


* NOTE: BUS IB, BUS REQ MSK, AND BUS MSK SB ARE TRI STATE-TIME MULTIPLEXED BUSES AT T3-T0 INFORMATION IS ENABLED FROM THE USI BOARD (S0AS) AT T1-T2 INFORMATION IS ENABLED FROM: UAI BOARD FOR BUS REQ MASK, UCB BOARD FOR BUS MSK SB, AND FROM UMD OR UAI WHEN REQUIRED FOR BUS IB.

REVISIONS		
CHK	CHANGE NO.	REV.

DRN. Q. Vincent	10-20-77	FIRST USED ON	VAX 11780
CHK'D. F. K...	11-5-77	TITLE	UBA BLOCK DIAGRAM
ENG. L. S...	7-10-77	SIZE CODE	B-DD-DW780-0
PROJ. ENG. K...	1-10-77	NUMBER	D BD DW780-0-3
PROD. J...	11-15-77	SCALE	1:1
NEXT HIGHER ASSY.		SHEET	1 OF 3

SHEET (CONT.) D BD DW780-0-3

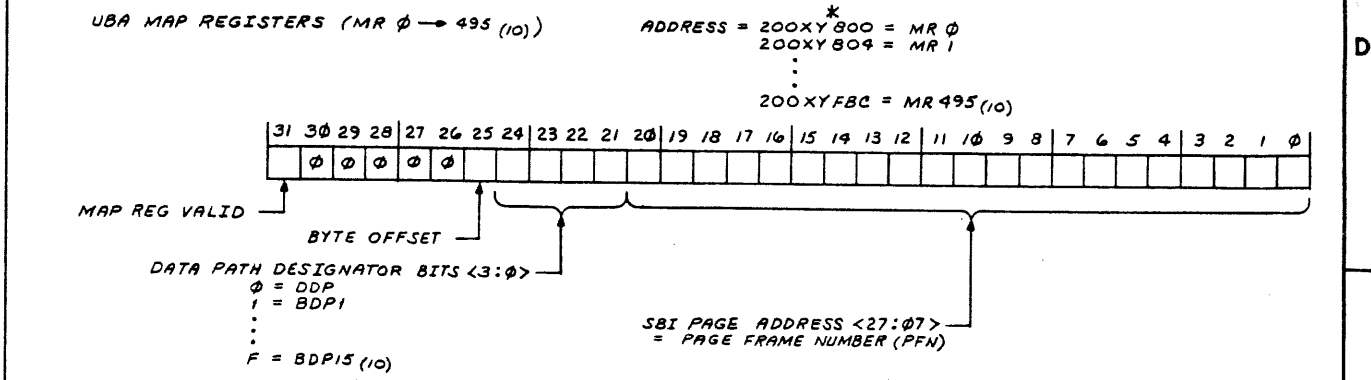
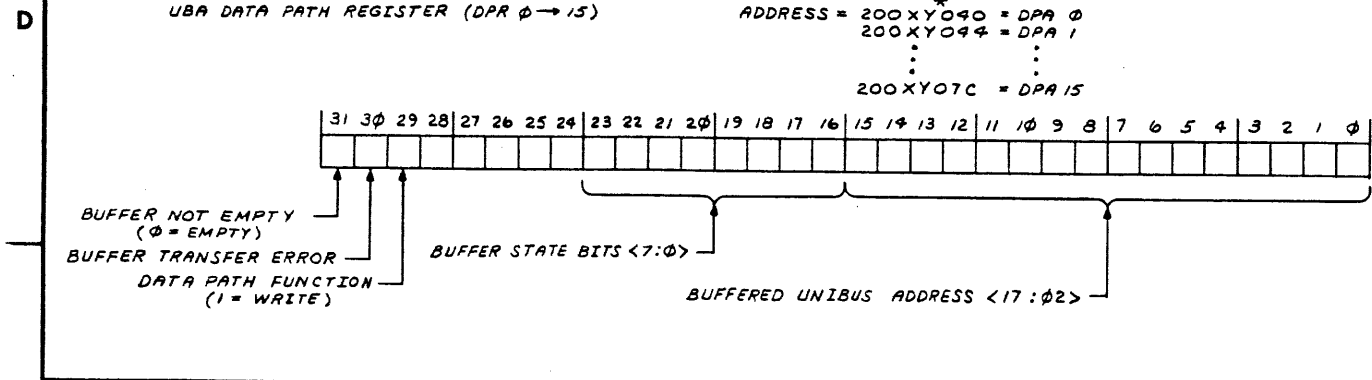


LIST CODE NUMBER DW780-0-3

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
UBA BLOCK DIAGRAM	D BD	DW780-0-3	
SCALE	SHEET	DIST.	
	2 OF 3		

"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"

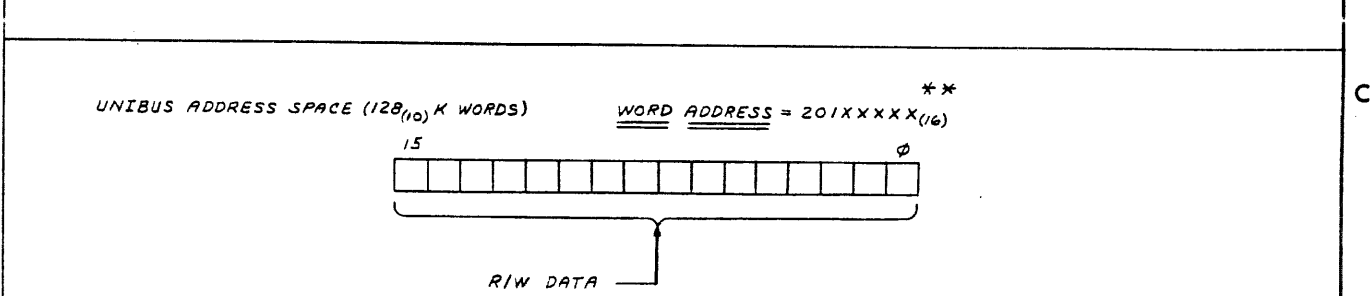


ADDRESSING NOTE
 VALUES OF X, Y FOR TR NUMBER OF UBA

TR NUMBER	X	Y
1	φ	2
2	φ	4
3	φ	6
4	φ	8
5	φ	A
6	φ	C
7	φ	E
8	1	0
9	1	2
10	1	4
11	1	6
12	1	8
13	1	A
14	1	C
15	1	E

UBA ADAPTER CODE (FROM CNFGR) AND UNIBUS ADDRESS SPACE FOR EACH UBA

UBA NUMBER	ADAPTER CODE	UNIBUS ADDRESS SPACE (HEX)
φ	28	20100000-2013FFFE
1	29	20140000-2017FFFE
2	2A	20180000-201BFFFE
3	2B	201C0000-201FFFFE



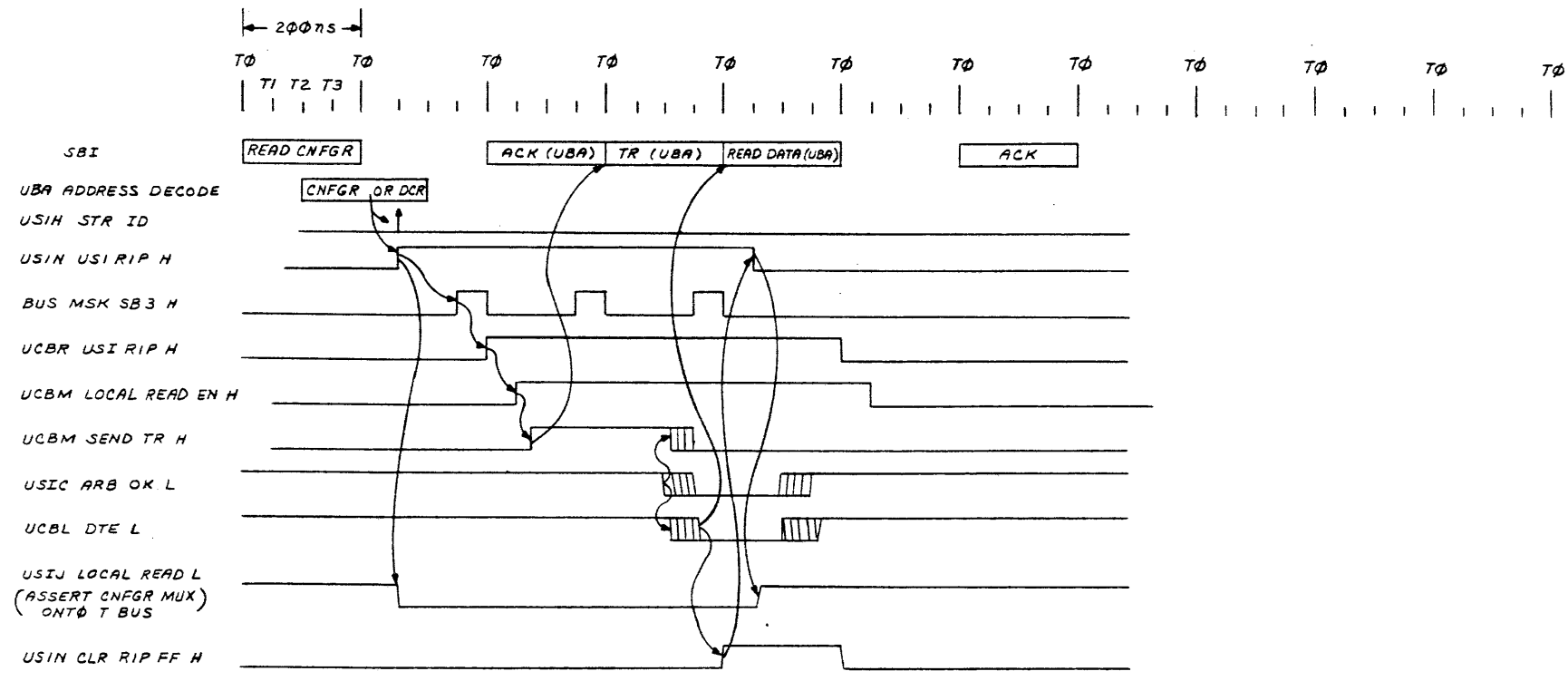
REVISIONS

CHK	CHANGE NO.	REV.

DW780-0-3

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION

SBI READ TO CNFGR OR DCR
 (MICROSEQUENCER NOT USED)



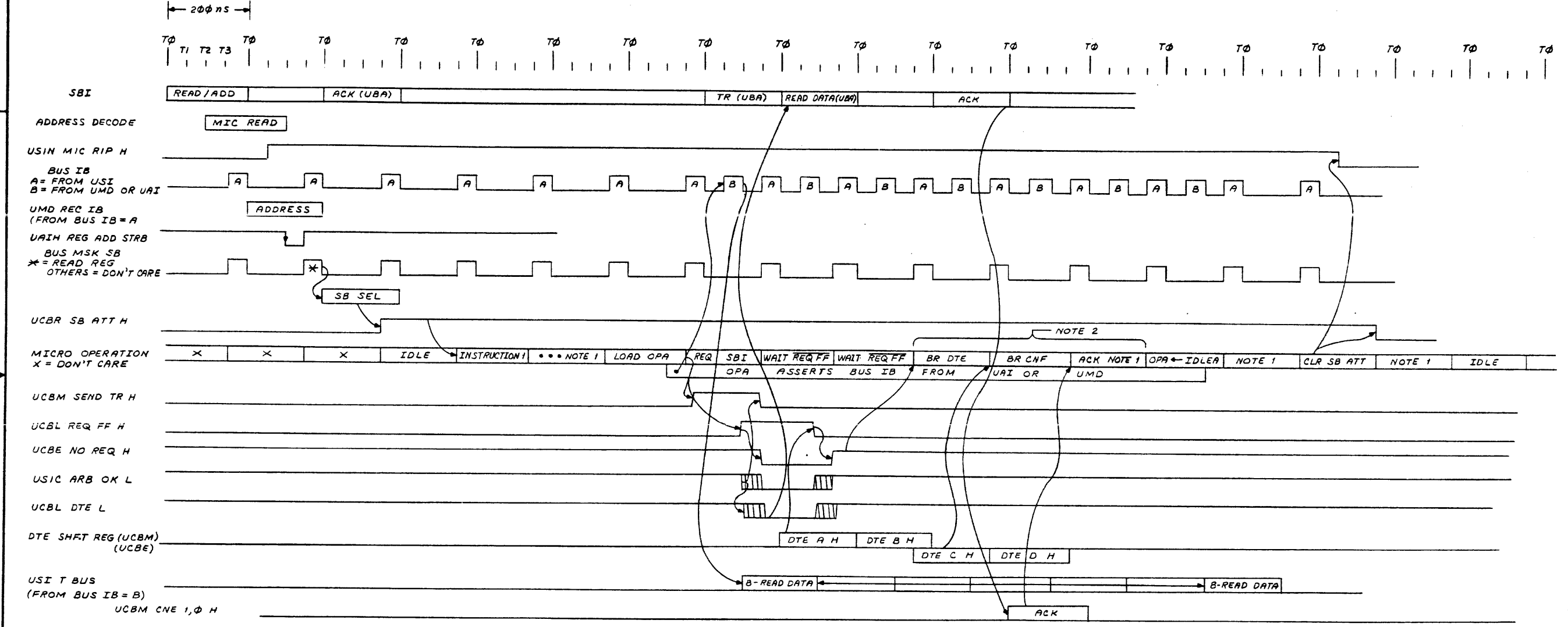
REV.	
CHG.	
CHK.	
REV.	
CHG.	
CHK.	

DRN. J. Vincent	10-18-77	FIRST USED ON	VAX 11780	DIGITAL
CHK. J. Vincent	11-8-77	TITLE	UBA TIMING DIAGRAM	
ENGR. J. Vincent	7-20-77	PROJ. ENGR. J. Vincent	7-20-77	
PROD. J. Vincent	11-18-77	NEXT HIGHER ASSY.		
B-DD-DW780-0		SCALE	1	
SHEET 1 OF 5		DIST.		

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

DITD DW780-0-4 2

SBI READ TO REGISTERS OTHER THAN CNFGR AND DCR
(MICRO SEQUENCER IS USED)



NOTE 1. THE NUMBER OF STATES REPRESENTED BY THESE BOXES MAY BE DIFFERENT FOR EACH ROUTINE.
NOTE 2. THESE STATES MAY NOT BE PRESENT IN ALL RETURN READ DATA ROUTINES.

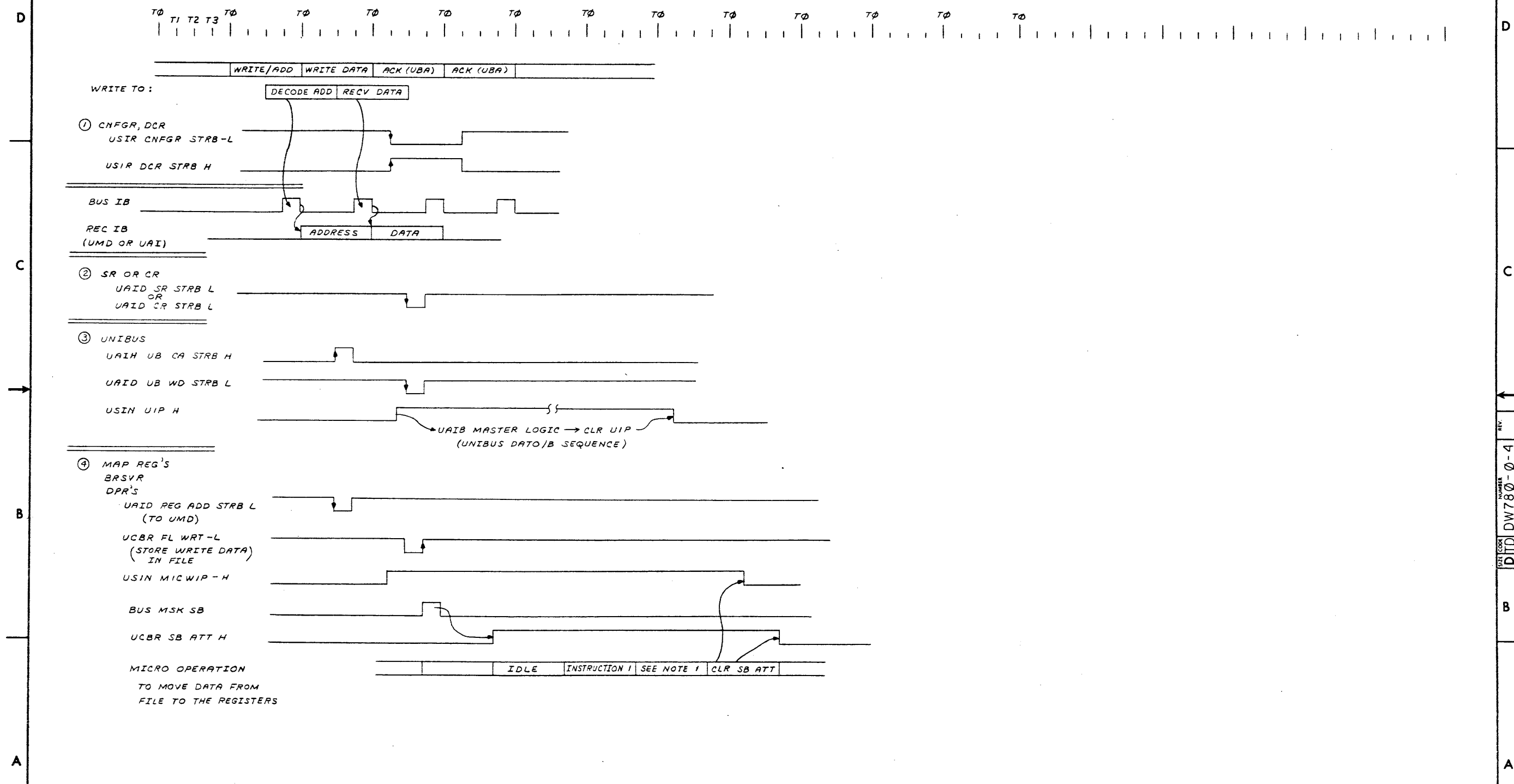
(SBI READ TO INTERNAL REGISTERS)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UBA TIMING DIAGRAM	SIZE CODE	DITD	NUMBER	DW780-0-4	REV.	
SCALE		SHEET	2 OF 5	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

SBI TO UBA OR UNIBUS WRITES

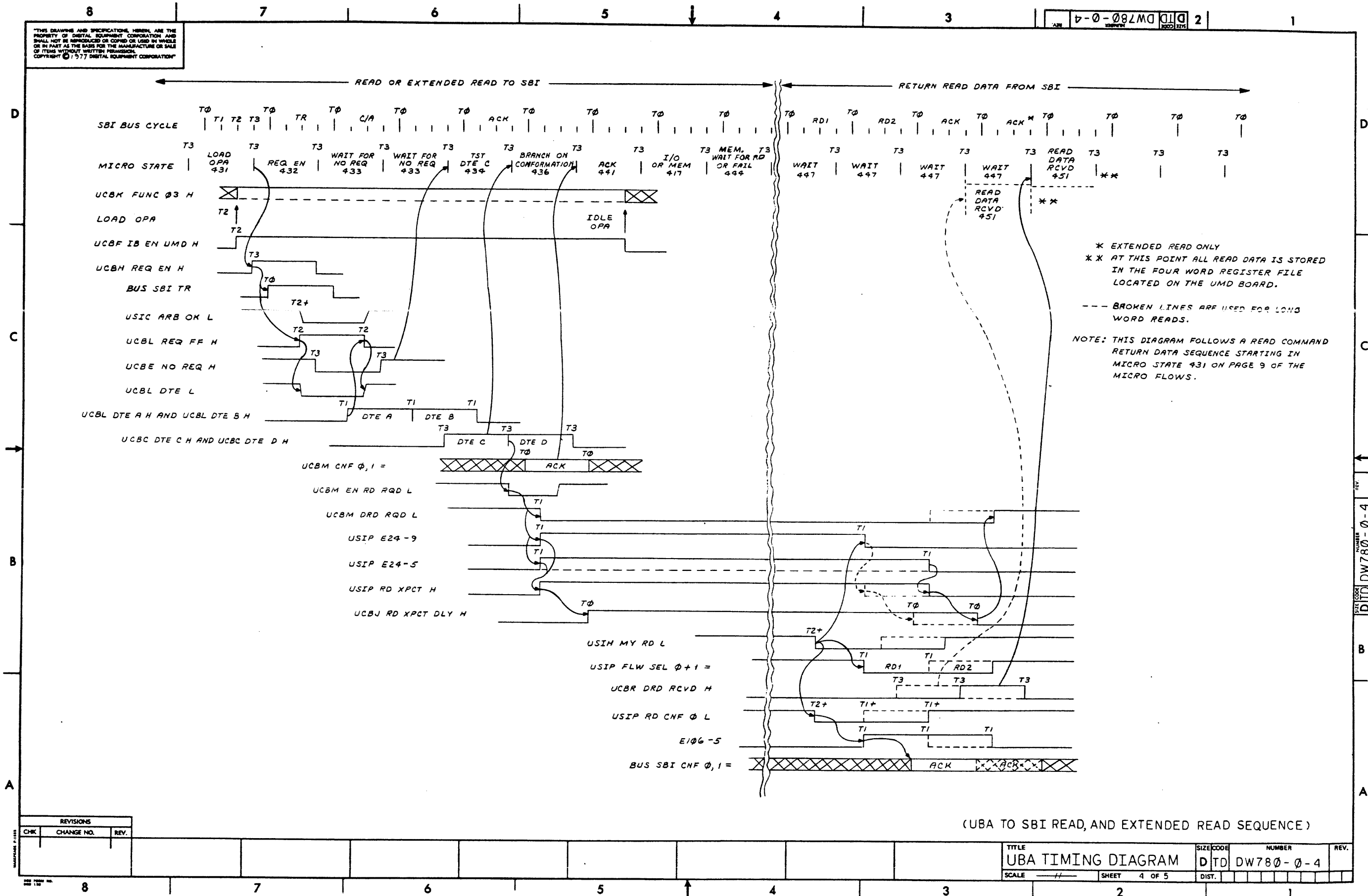


(SBI WRITES TO UBA OR UNIBUS TIMING)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
UBA TIMING DIAGRAM	D 10	DW780-0-4	
SCALE	SHEET	DIST.	
	3 OF 5		

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



(UBA TO SBI READ, AND EXTENDED READ SEQUENCE)

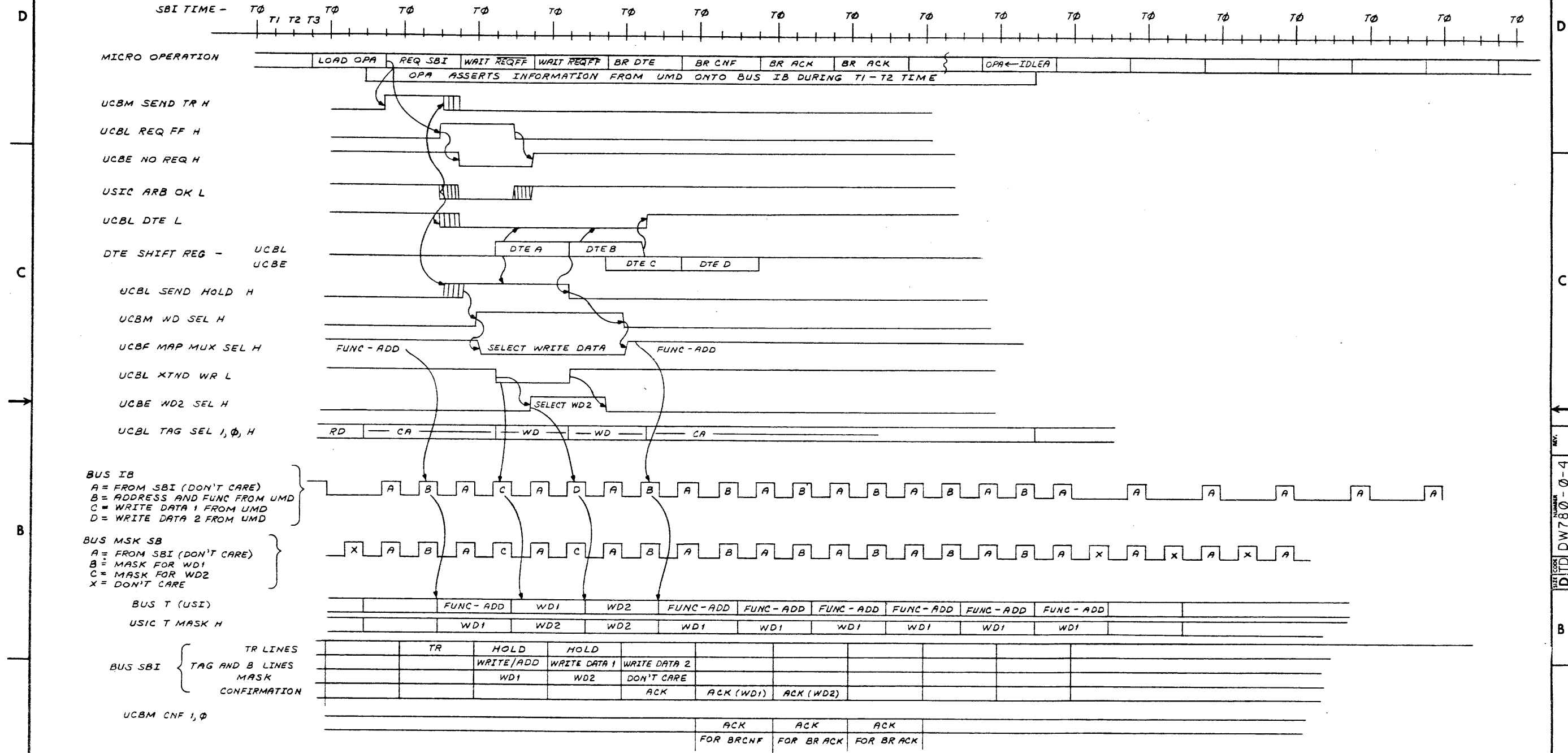
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UBA TIMING DIAGRAM	SIZE CODE	D TD	NUMBER	DW780-0-4	REV.	
SCALE		SHEET	4 OF 5	DIST.			

DITD DW780-0-4

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT ©1977 DIGITAL EQUIPMENT CORPORATION

UBA - SBI EXTENDED WRITE TIMING -



(UBA TO SBI EXTENDED WRITE SEQUENCE)

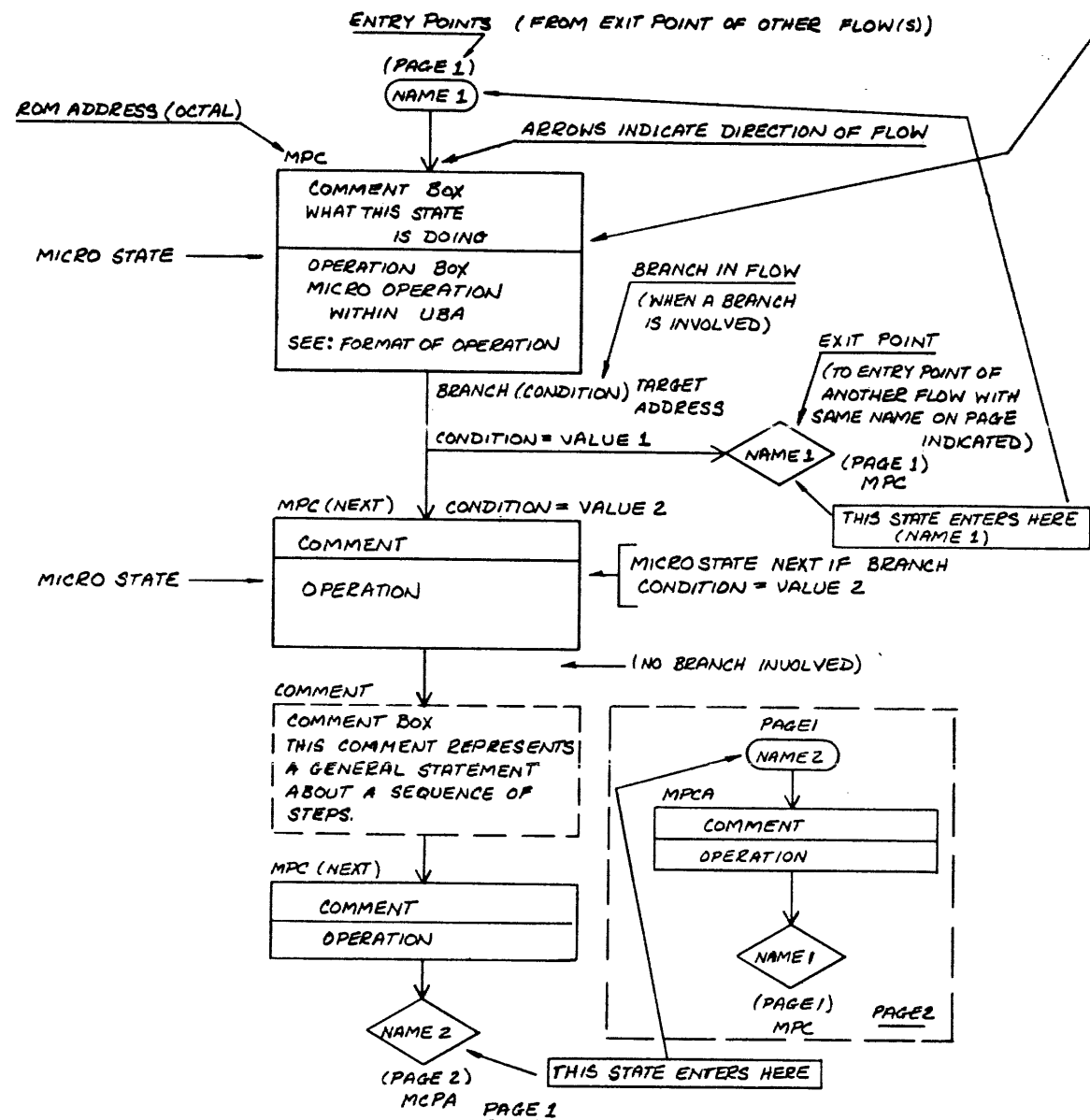
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UBA TIMING DIAGRAM	SIZE CODE	D TD	NUMBER	DW780-0-4	REV.	
SCALE		SHEET	5 OF 5	DIST.			

DW780-0-4

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION

UBA MICRO FLOW ORGANIZATION



NOTE: THE UBA MICRO FLOWS SHOW ONLY THE FLOWS OF THE CONTROL OPERATIONS. THE MICRO OPERATIONS OF THESE FLOWS ACCOUNT FOR ALL THE ROM FIELDS OF THE CONTROL STORE ROM IN SYMBOLIC NOMENCLATURE. THE UCB MICRO SEQ GUIDE (MB271 PRINT SET) SHOWS ALL OF THE ROM FIELDS AND THE VALUES REQUIRED TO PERFORM THE OPERATIONS DESCRIBED IN THESE FLOWS. THE "OCTAL REPRESENTATION OF UCB CONTROL STORE" (MB271 PRINT SET) SHOWS THE ACTUAL VALUE OF THE CONTROL STORE ROM FOR EACH ROM ADDRESS.

FORMAT OF OPERATION BOX

- MOVE**
DESTINATION ← SOURCE
- VALUE OF A ROM FIELD**
(WHEN OTHER THAN IDLE STATE AND NOT AFFECTED BY OTHER OPERATIONS OF THIS STATE, USED FOR PREPARATION FOR NEXT STATE OR TO LOCK OUT DMA ATTENTION FOR THIS STATE)
ROM FIELD = VALUE
- BUS ASSERTION (FOR OTHER THAN A MOVE TO A REGISTER)**
BUS ← SOURCE
- LOAD OPA:** VALUE OF OPA FIELDS WHEN OTHER THAN IDLE STATE ARE LISTED BELOW "LOAD OPA".
- LOAD OPB:** VALUE OF OPB FIELDS WHEN OTHER THAN IDLE STATE ARE LISTED BELOW "LOAD OPB".
- CHANGE STATE:** THE NEW VALUES OF BNE (BSTATE), BTE AND BFNC ARE LISTED BELOW "CHANGE STATE". ONLY THE VALUES CHANGED ARE LISTED. ALL OTHERS REMAIN UNCHANGED.
- CHANGE MASK:** SETS AND CLEARS MASK BITS. ALL MASK BITS ARE CLEARED BY CLEAR MASK. MASK BITS ARE SET INDIVIDUALLY OR IN PAIRS AS INDICATED BY THE MASK ROM PATTERN (UCB MICRO SEQ GUIDE) FORMAT—
MSK ROM ← SMSK 3, 2
SETS MASK BITS 2 AND 3 (THESE ARE THE BUFFER STATE BITS OF THE DATA PATH REG.) ONLY THE BITS INDICATED BY SMSK ARE CHANGED. ALL OTHER BITS REMAIN UNCHANGED.

FUNCTIONS OF OPA-OPB

- OPA - BUS IB CONTROL AT T1-T2 TIME.**
- SBI TRANSMIT FUNCTION (OP CODE ON UCB MICRO SEQ GUIDE)
 - DP MUX ENABLE
 - COUNTER INCREMENT CONTROL
- OPB - BUS AD CONTROL**
- MAP DATA ENABLE AND UCBN AD MUX AND UCBF BDP NO. IN SELECTS

IDLE STATE OF OPA (IDLEA)

- OP CODE = ϕ (NO SBI OPERATION)
- MIC STATE = ϕ
- DP MUX DISABLE = ϕ (ENABLED)
- IB EN = ϕ (BUS IB DISABLED DURING TIME T1-T2)
- CNTR INC = 1 (ENABLED)

IDLE STATE OF OPB (IDLEB)

- BUS AD = ADD HLD (UNIBUS ADDRESS)
- CNTR SEL, MAP DATA DISABLE (MDS) = ϕ
(MAP DATA ENABLED)
- UCB AD MUX SELECTS
- DATA PATH REG CONTENTS (MASK AND STATE BITS)

NOTATION FOR DP RAM ACCESS (REFER TO UCB PRINTS - DP RAM ORGANIZATION)

BYTE POSITIONS SHOWN BY * BELOW
DPA (FUNCTION OF BSS) 01, 11, 21, 32

HORIZONTAL POSITION DETERMINED BY DSS
VERTICAL POSITION DETERMINED BY LAD FOR BYTE 0,1,2
HAD FOR BYTE 3

	LAD		HAD	
3	03	13	23	33
2	02	12	22	32*
1	01*	11*	21*	31
0	00	10	20	30

0 1 2 3 - BYTE

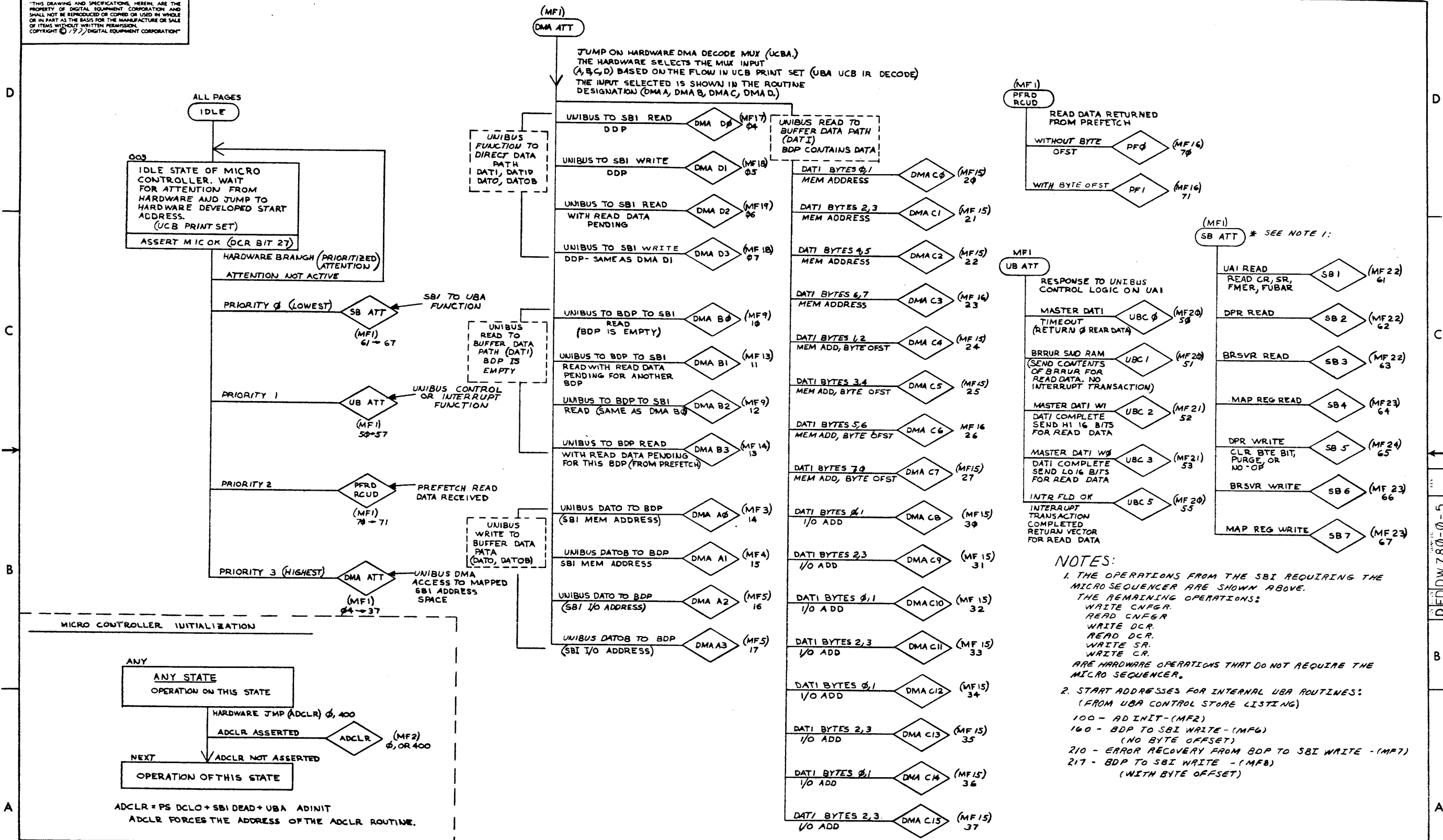
IDLE STATE ROM FIELDS

- | | |
|----------------------|--------------------------|
| CFD = NO OP | LAD = ϕ |
| CFS = NO OP | FRS = ADPT WD |
| CFB = NO OP | MAS = BUS AD |
| CFA = NO OP | MWS = MAP HI |
| DSS = NO SHIFT | BSS = BDP NUM (FROM MAP) |
| DMS = ID (UMDA FILE) | BRG } = NO BRANCH |
| HAD = ϕ | BRS } |

(MICRO FLOW FORMAT AND ORGANIZATION)

DRN. L. CHILDS	10-2-77	FIRST USED ON	VAX 11780
CHKD	1/83	TITLE	
ENGL	7A-77		
PROL. ENGL.	7A-77		
PROD.	11/8/77		
NEXT HIGHER ASSY.			
B-DD-DW780-0	SIZE CODE	NUMBER	REV.
SCALE	D	FD DW780-0-5	
SHEET 1	OF 27	DIST.	

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

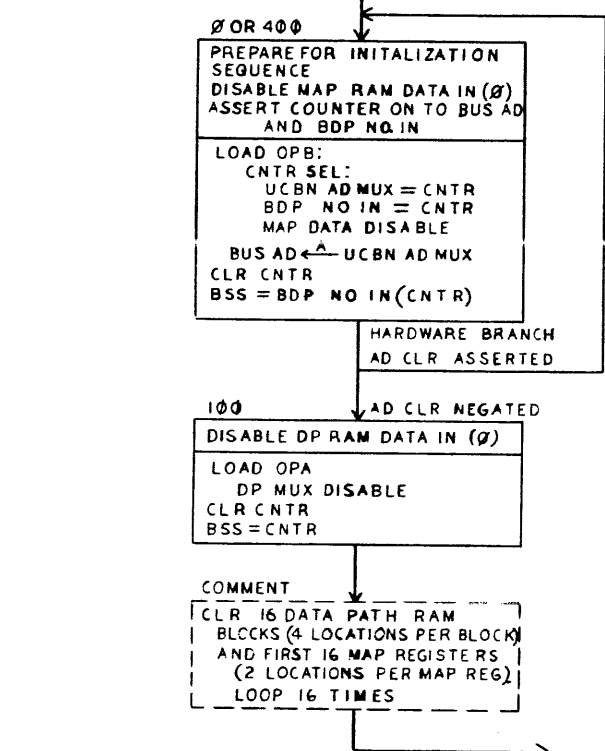
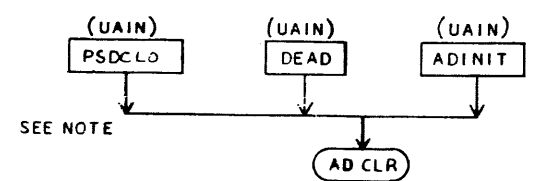
(HARDWARE ENTRY POINTS INTO MICRO CONTROLLER) (MF1)

TITLE	UBA MICRO FLOWS	SIZE CODE	D F D	NUMBER	DW780-0-5	REV.	
SCALE		SHEET	2	OF	27	DIST.	

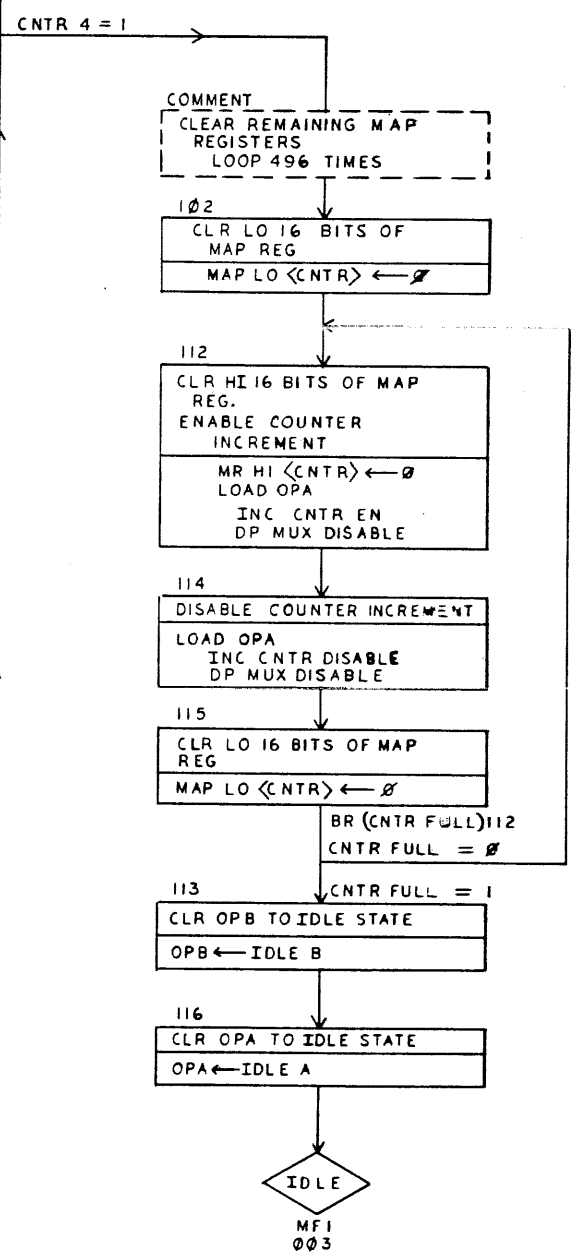
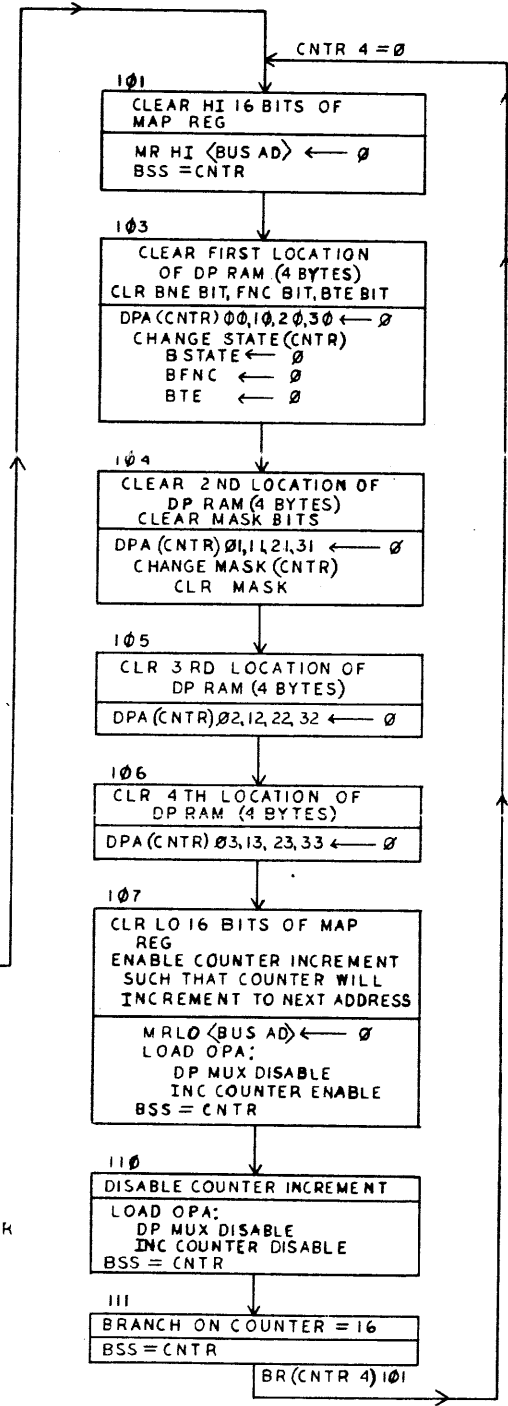
DFD DW 780-0-5

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

UBA INITIALIZATION SEQUENCE



NOTE: ADCLR IS A CONDITION FORCED BY:
 1. POWER SUPPLY DCLO ASSERTED (PS DCLO)
 2. SBI DEAD ASSERTED (DEAD)
 3. CONTROL REGISTER BIT ADINIT ASSERTED (WHEN SET, THIS BIT IS ASSERTED AND IT IS THEN CLEARED BY THE HARDWARE 402 NS LATER.)
 WHEN ADCLR IS ASSERTED, THE MICRO SEQUENCER WILL BE FORCED INTO THIS ROUTINE FROM WHAT EVER STATE THAT IT WAS IN.

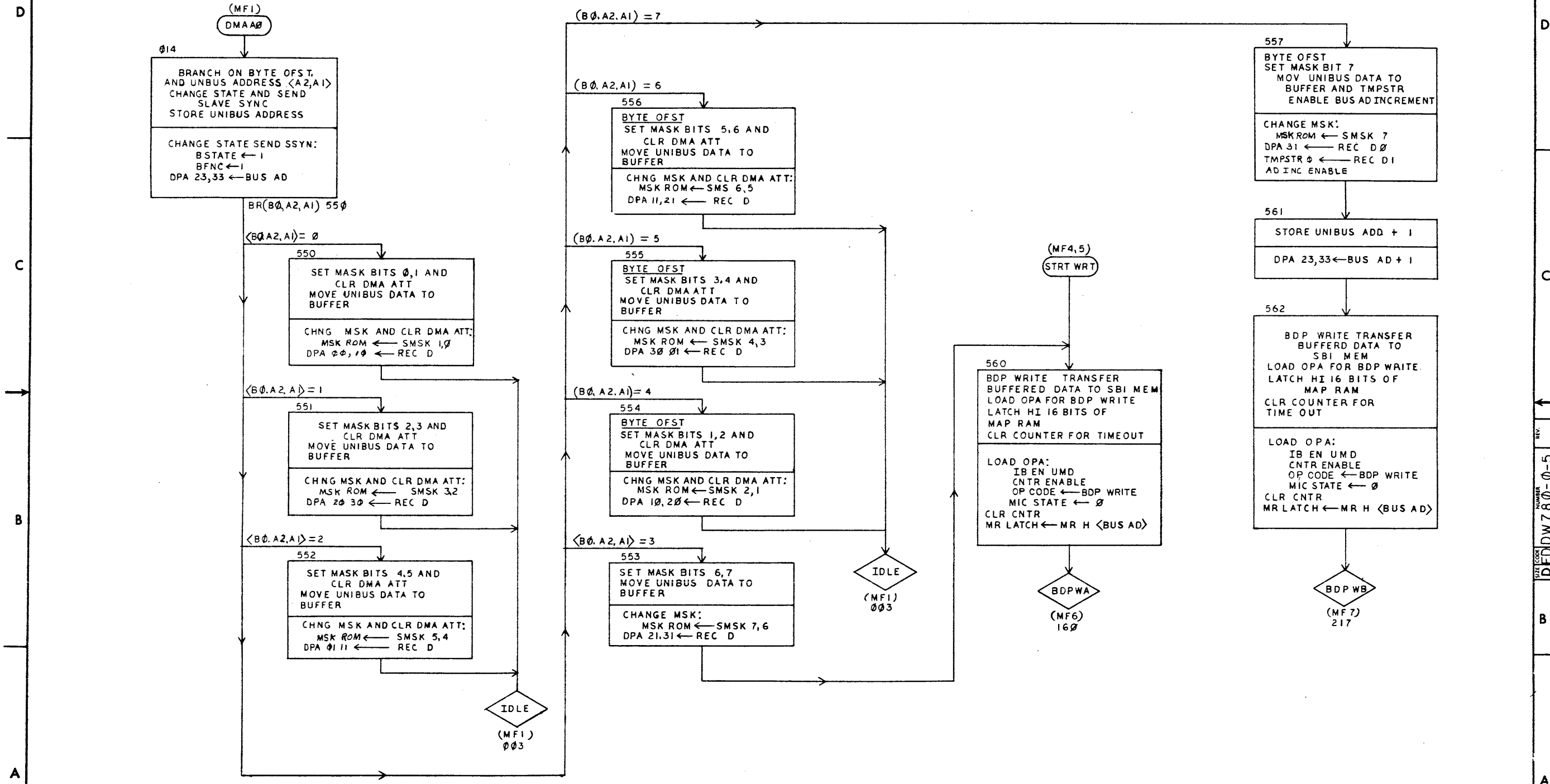


(UBA INITIALIZATION SEQUENCE)

REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

MEM DATOB-UNIBUS DATO VIA BDP TO SBI MEM ADDRESS SPACE

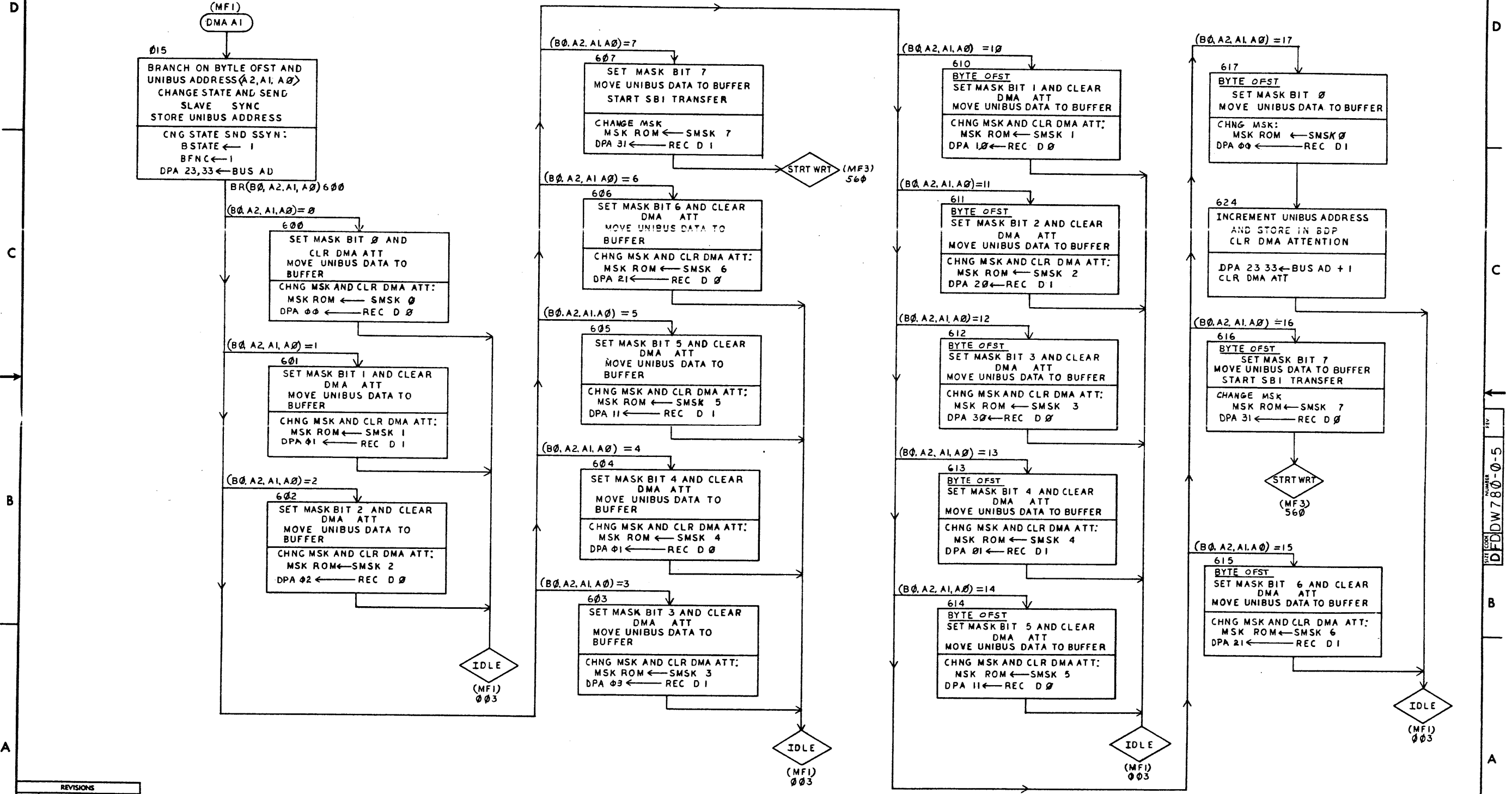


REVISIONS		
CHK	CHANGE NO.	REV.

REV. 2 DFD DW780-0-5

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"

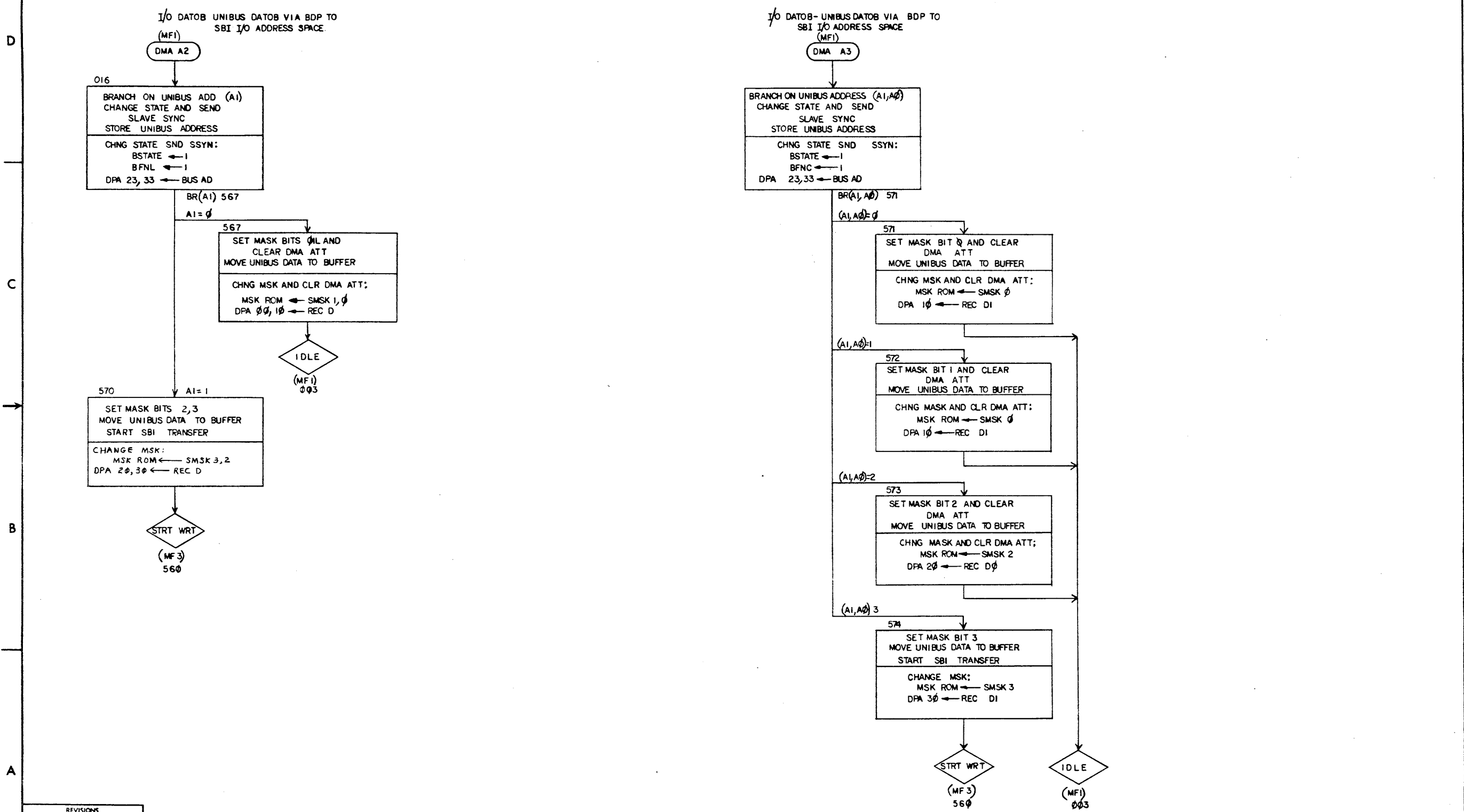
MEM DATOB UNIBUS DATOB VIA BDP TO SBI MEM ADDRESS SPACE



REVISIONS		
CHK	CHANGE NO.	REV.

REV. NUMBER DFD DW 780-0-5

"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"

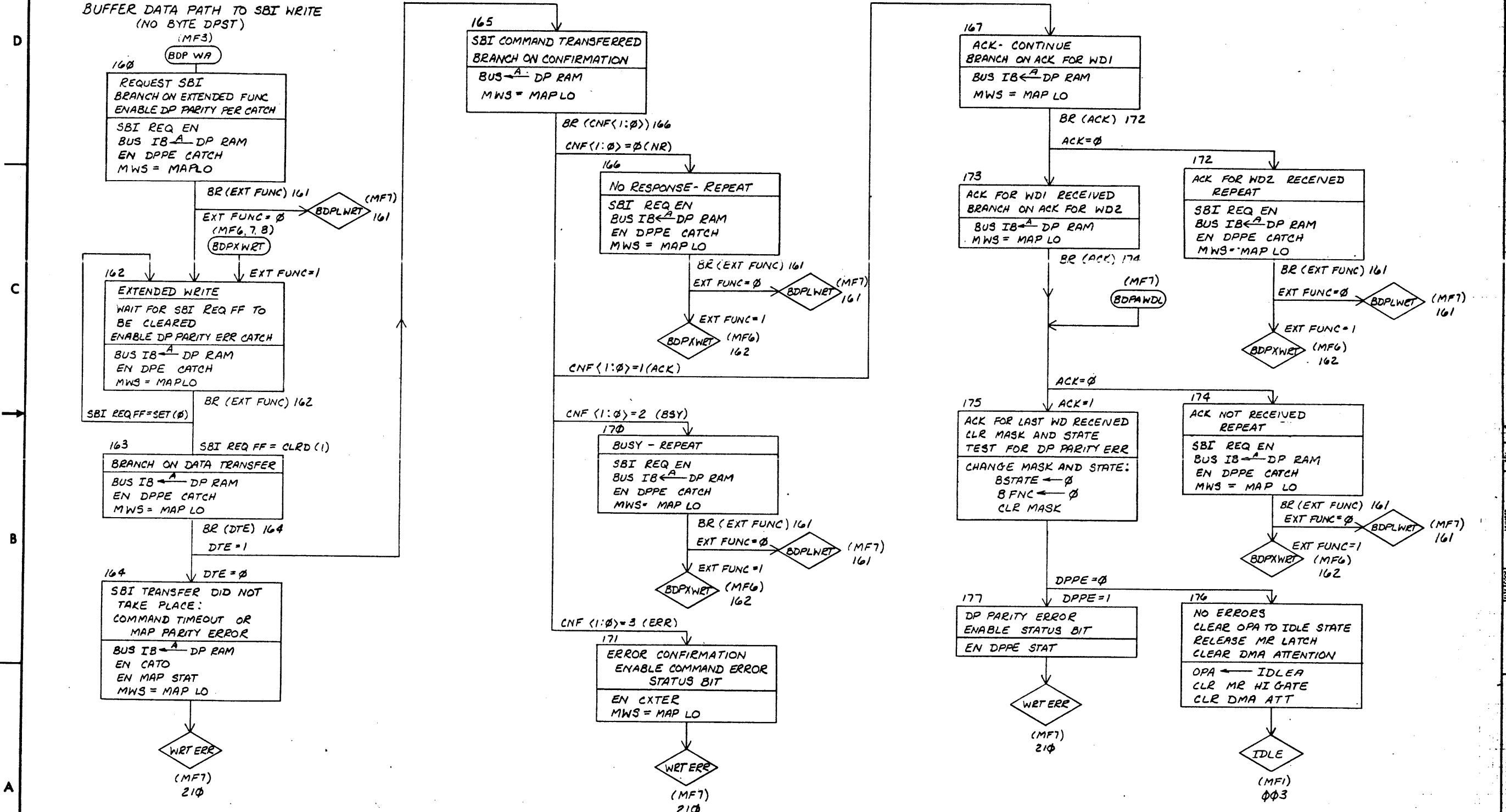


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		UBA MICRO FLOWS		SIZE CODE	DFD	NUMBER	DW780-0-5	REV.	
SCALE		SHEET	6 OF 27	DIST.					

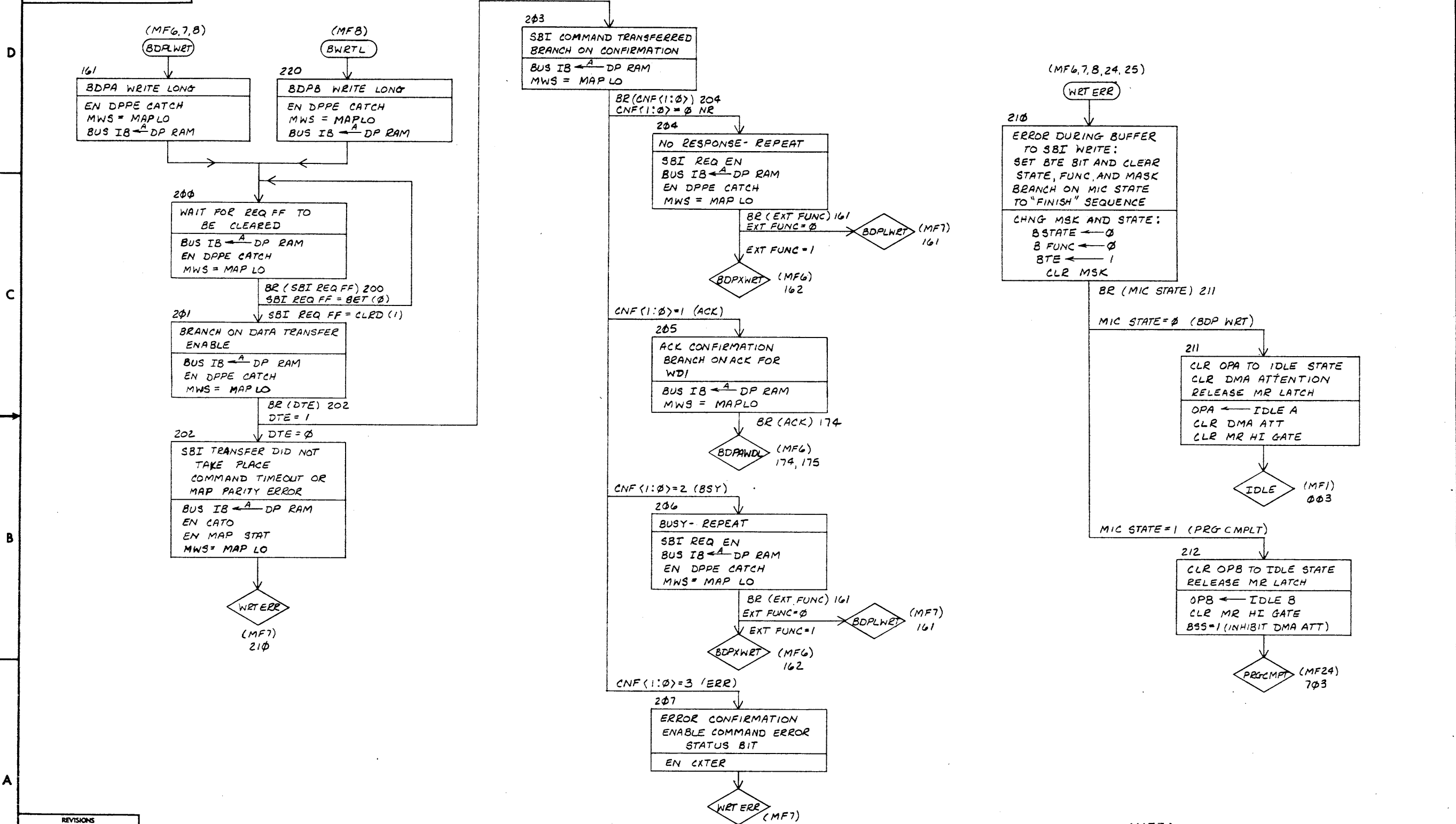
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

BUFFER DATA PATH TO SBI WRITE
(NO BYTE DPST)



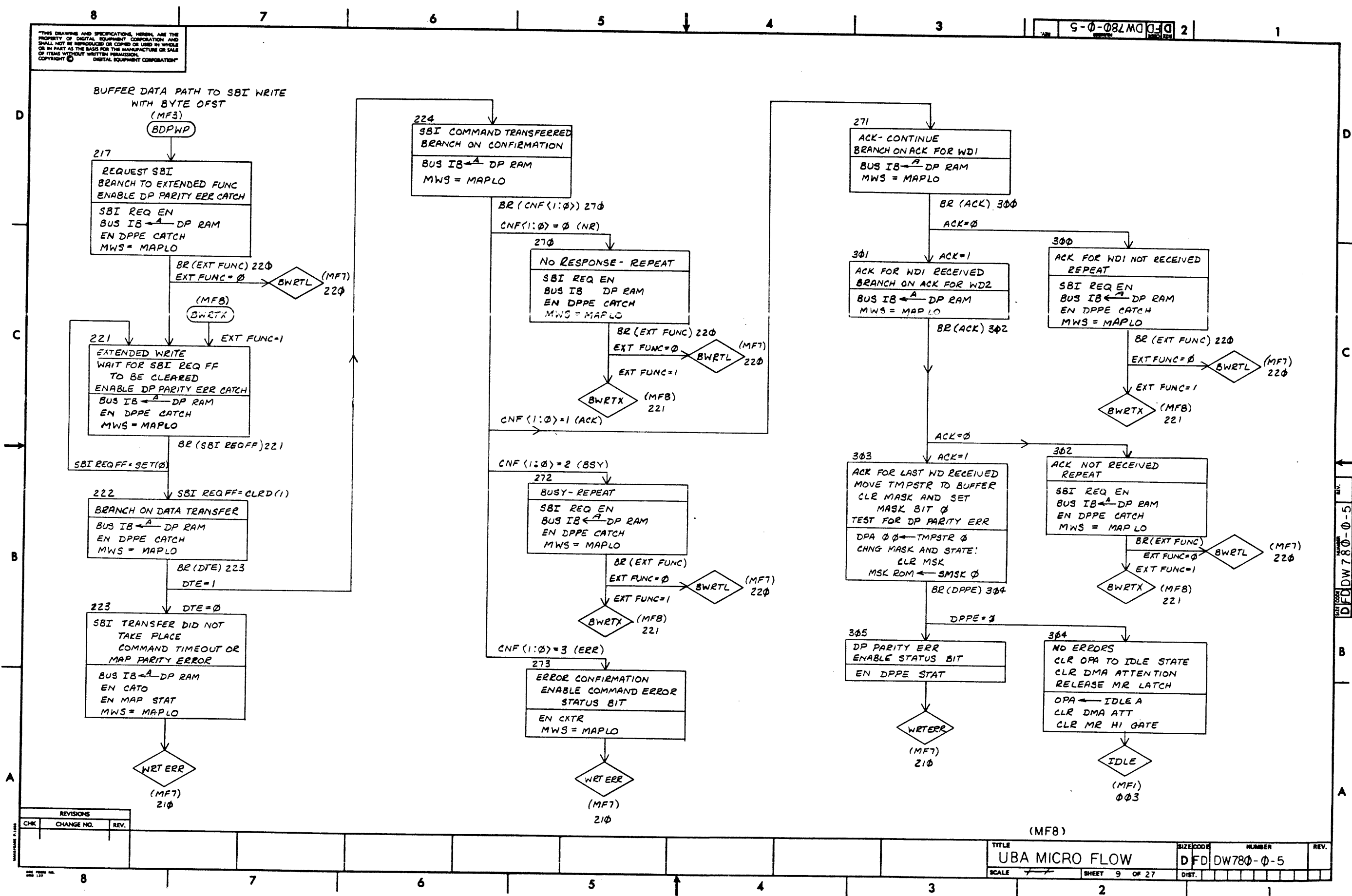
REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

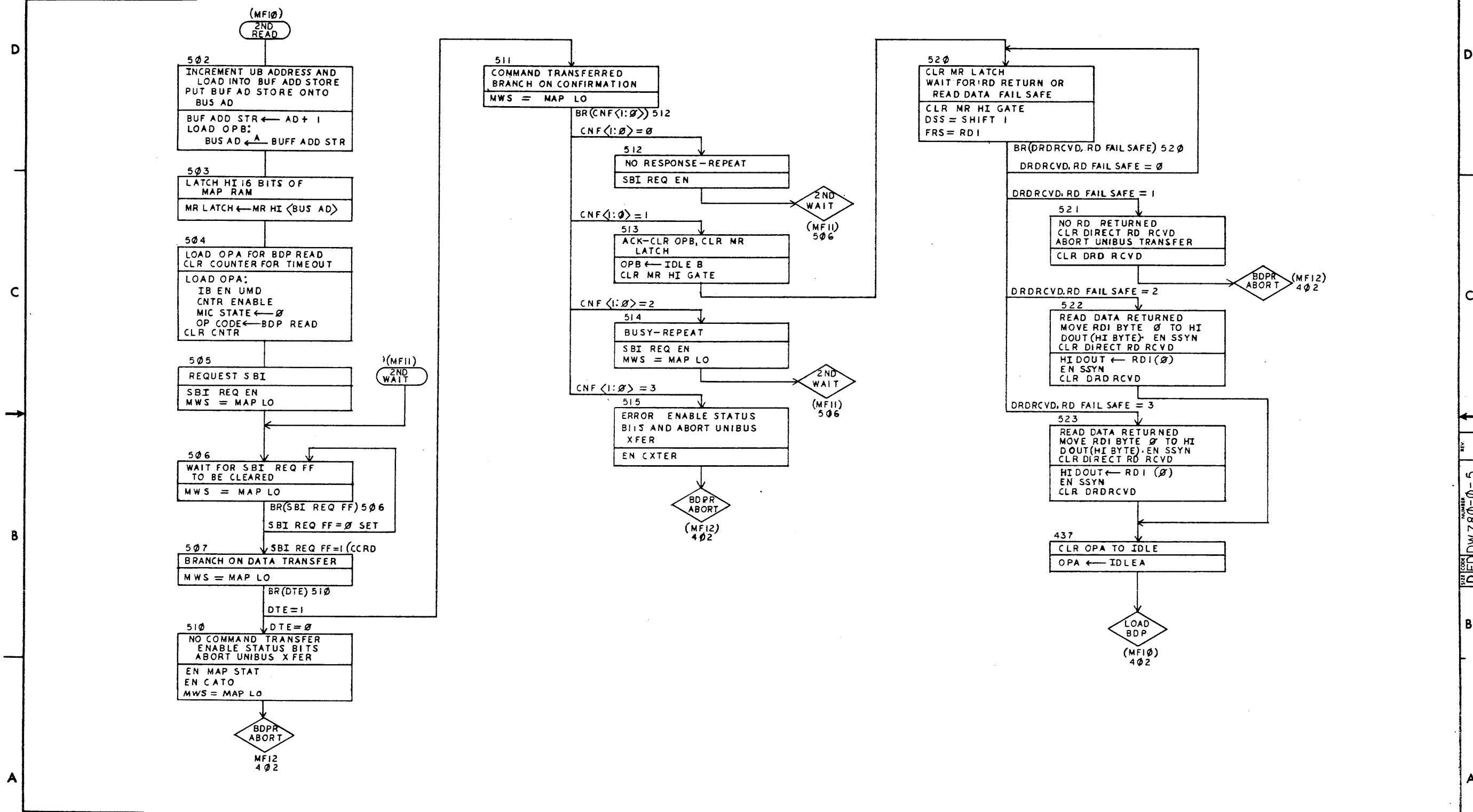
THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION



DFD DW 780-0-5

REVISIONS		
CHK	CHANGE NO.	REV.

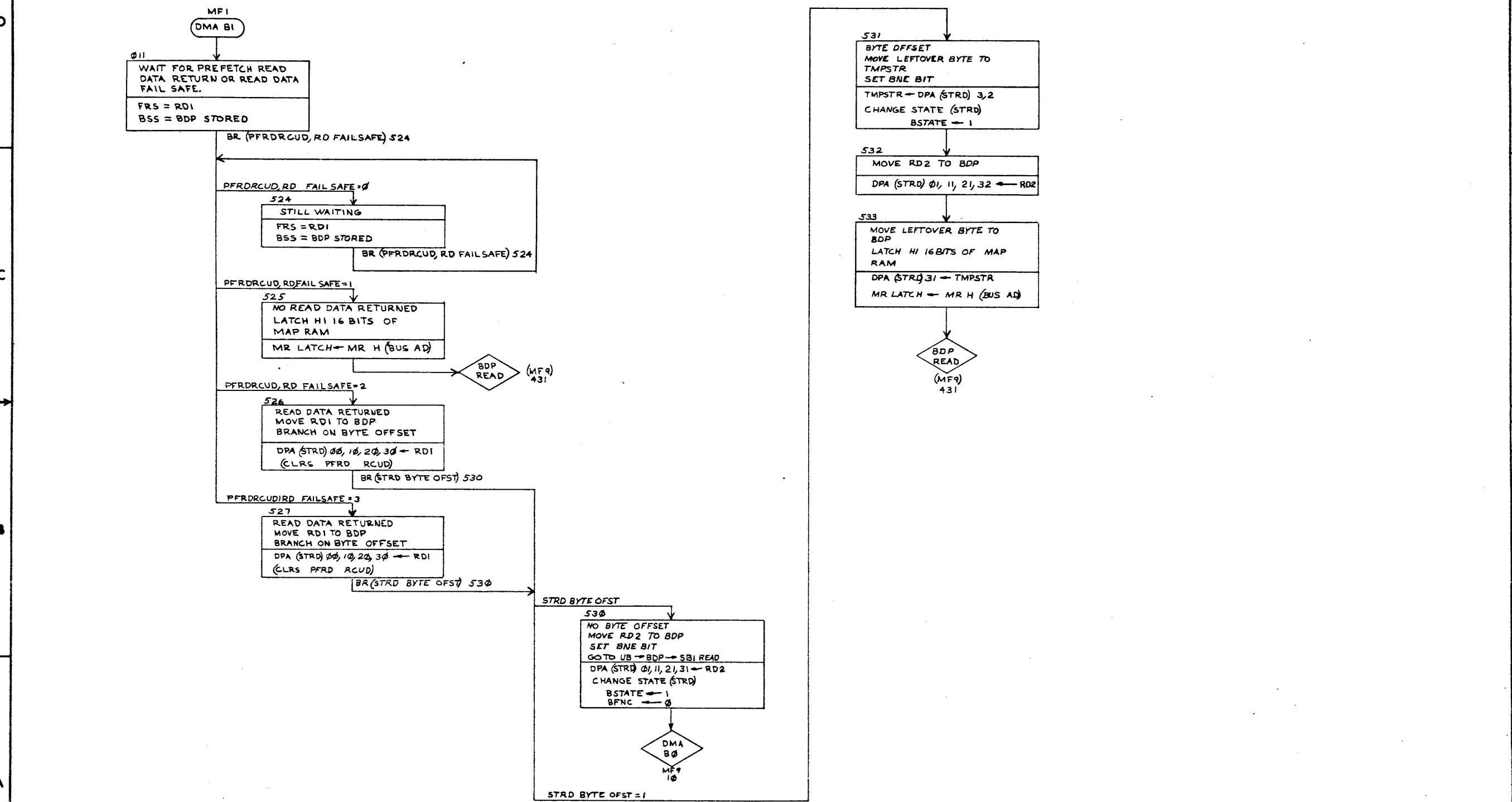
"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"



REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

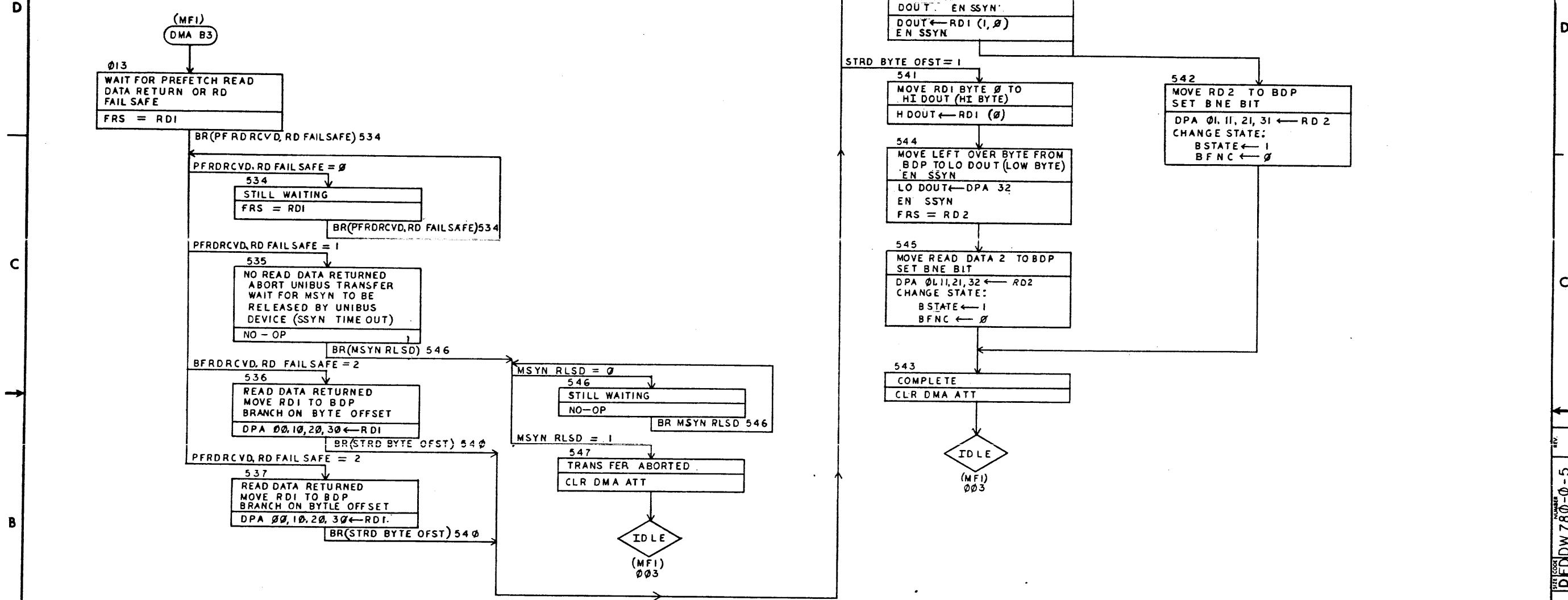
UB-BDP-SBI READ
WITH A PREFETCH READ DATA
PENDING FOR ANOTHER BDF.



REVISIONS		
CHK	CHANGE NO.	REV.

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"

UNIBUS TO BDP TO SBI READ WITH PREFETCH READ DATA PENDING FOR THE SAME BDP

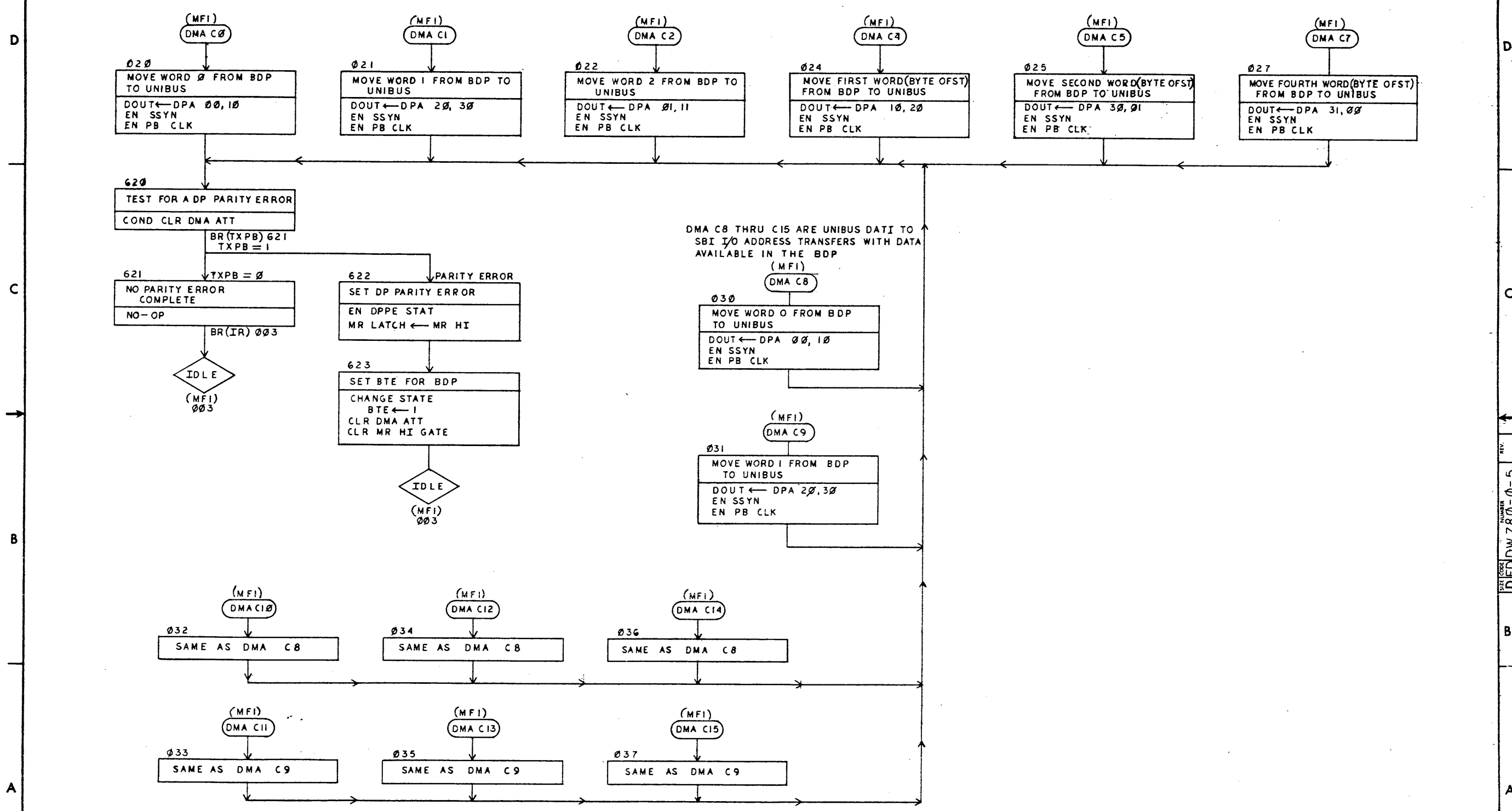


REVISIONS		
CHK	CHANGE NO.	REV.

DW780-0-5

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

DMA C0 THRU C7 ARE UNIBUS DATA TO SBI MEMORY ADDRESS TRANSFERS - WITH DATA AVAILABLE IN THE BDP

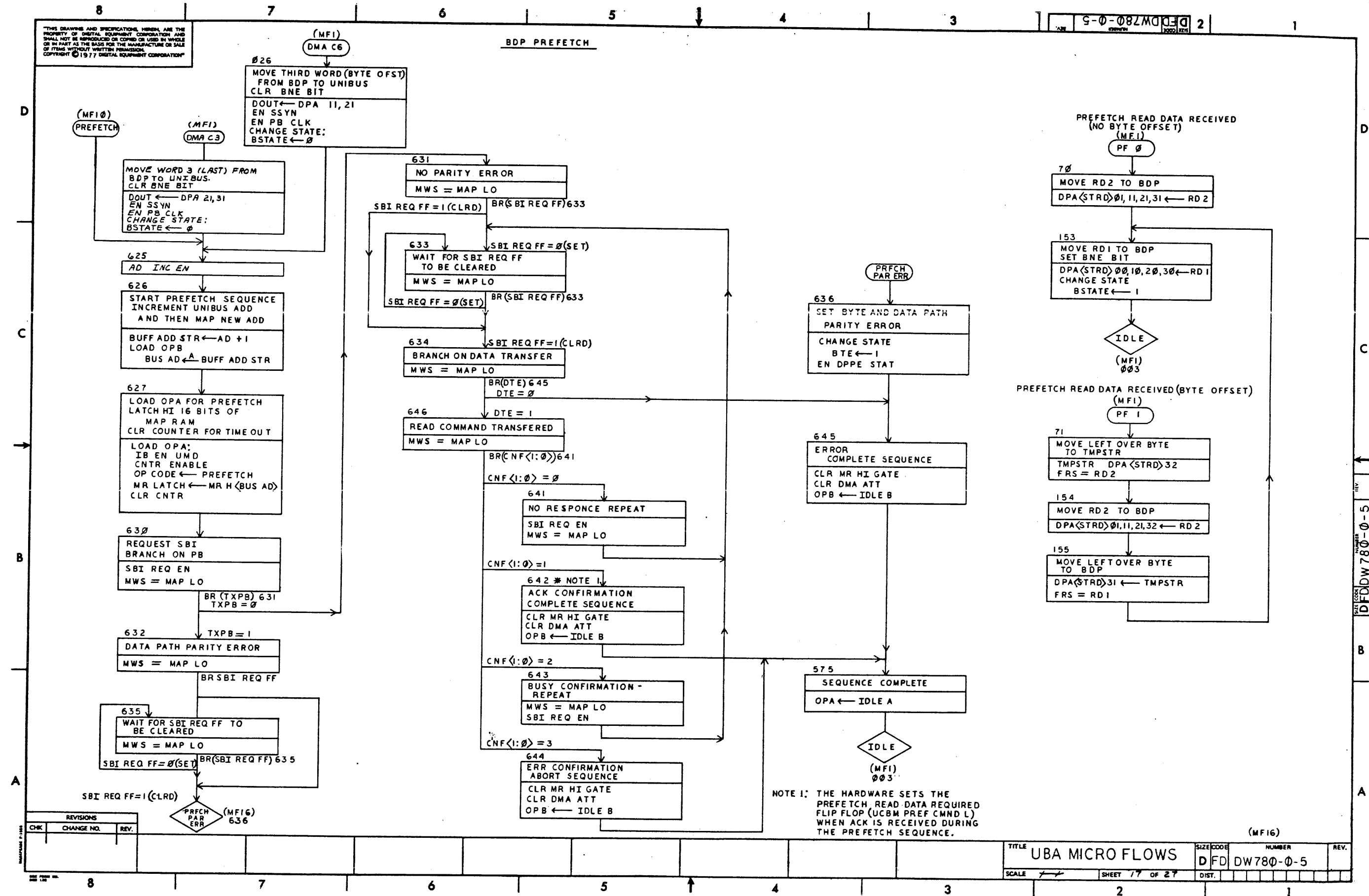


REVISIONS		
CHK	CHANGE NO.	REV.

REV. NUMBER DW780-0-5

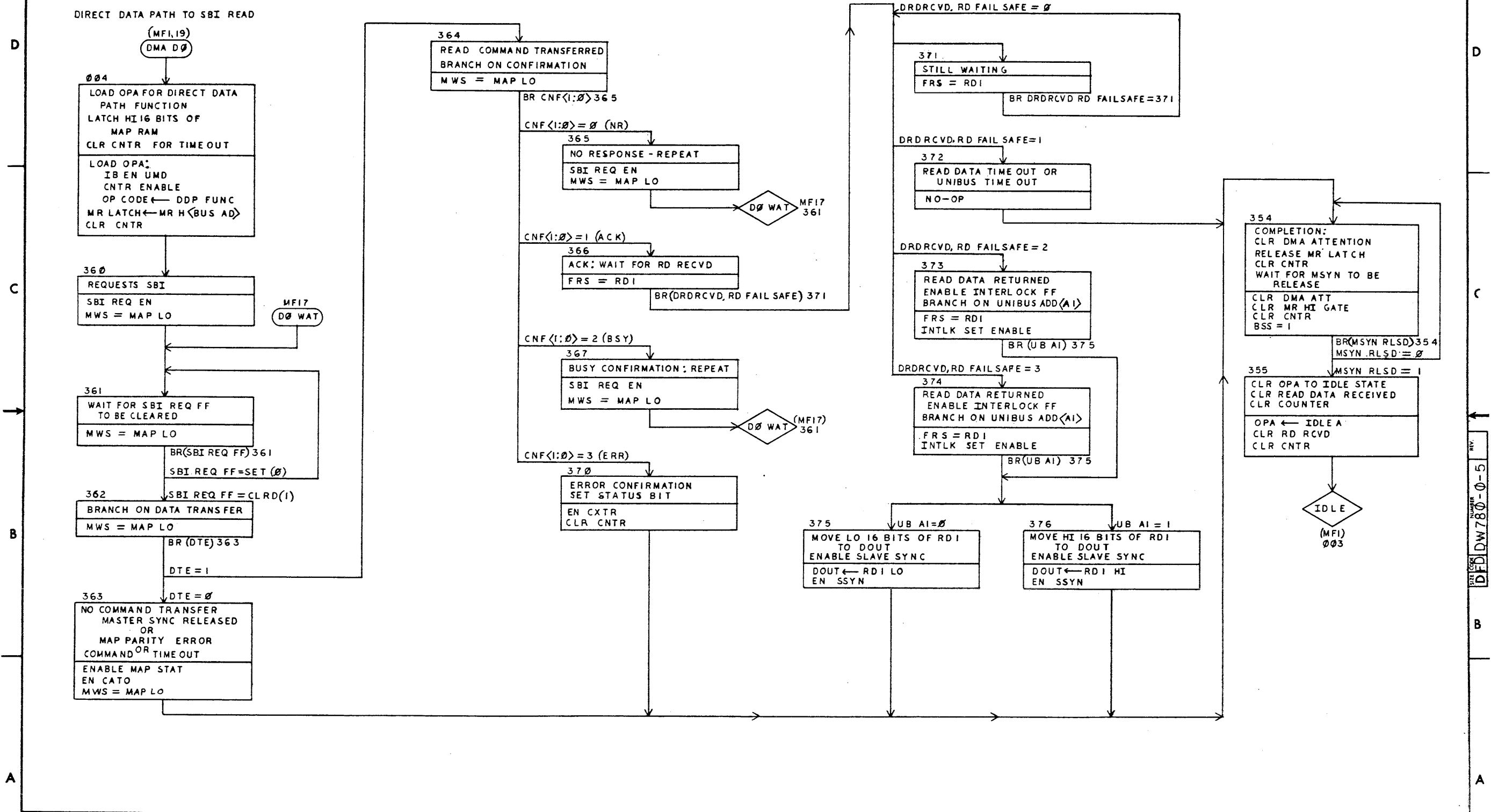
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

5-0-082MDF 2



NOTE 1: THE HARDWARE SETS THE PREFETCH READ DATA REQUIRED FLIP FLOP (UCBM PREF CMND L) WHEN ACK IS RECEIVED DURING THE PREFETCH SEQUENCE.

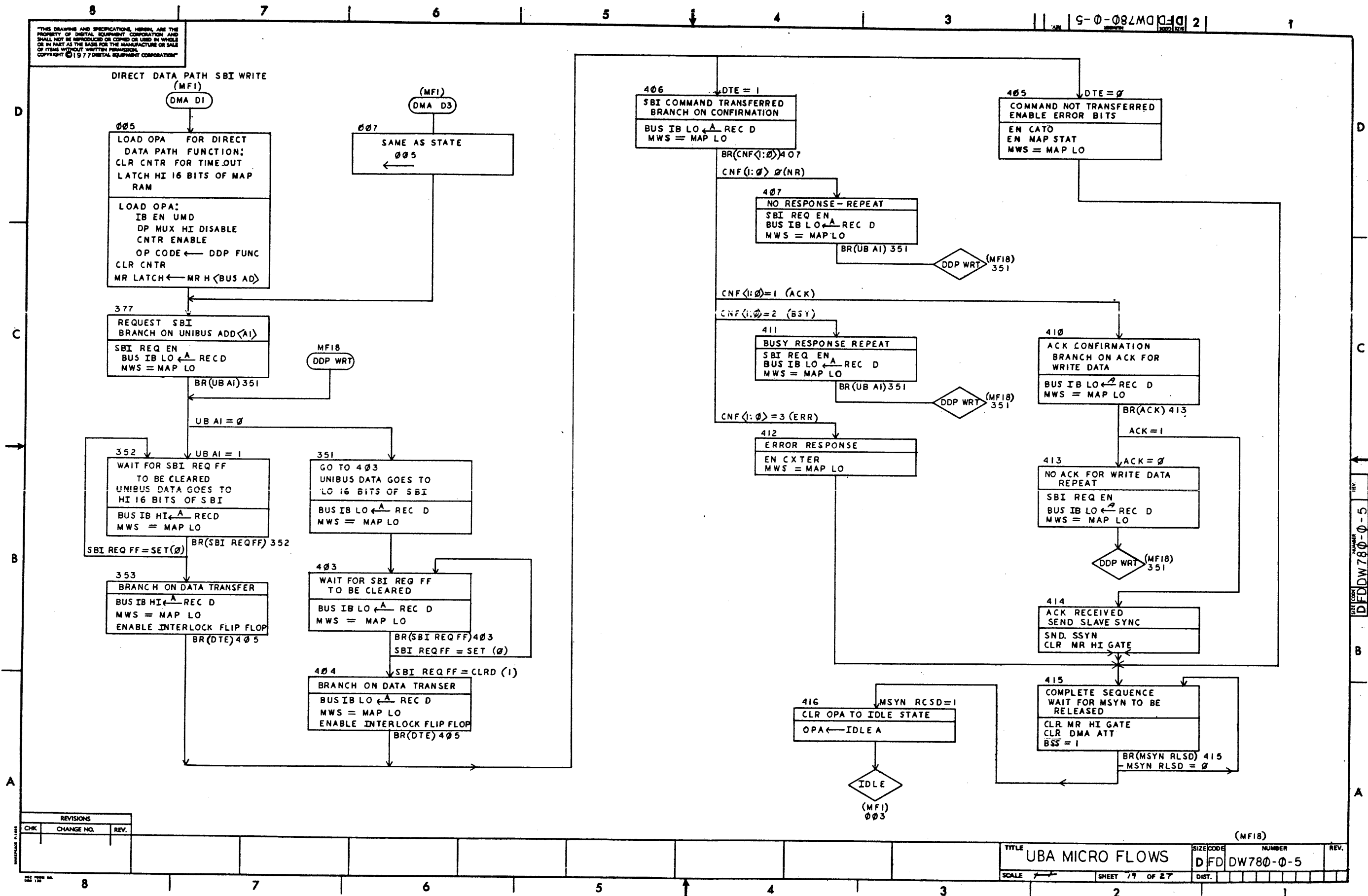
THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS

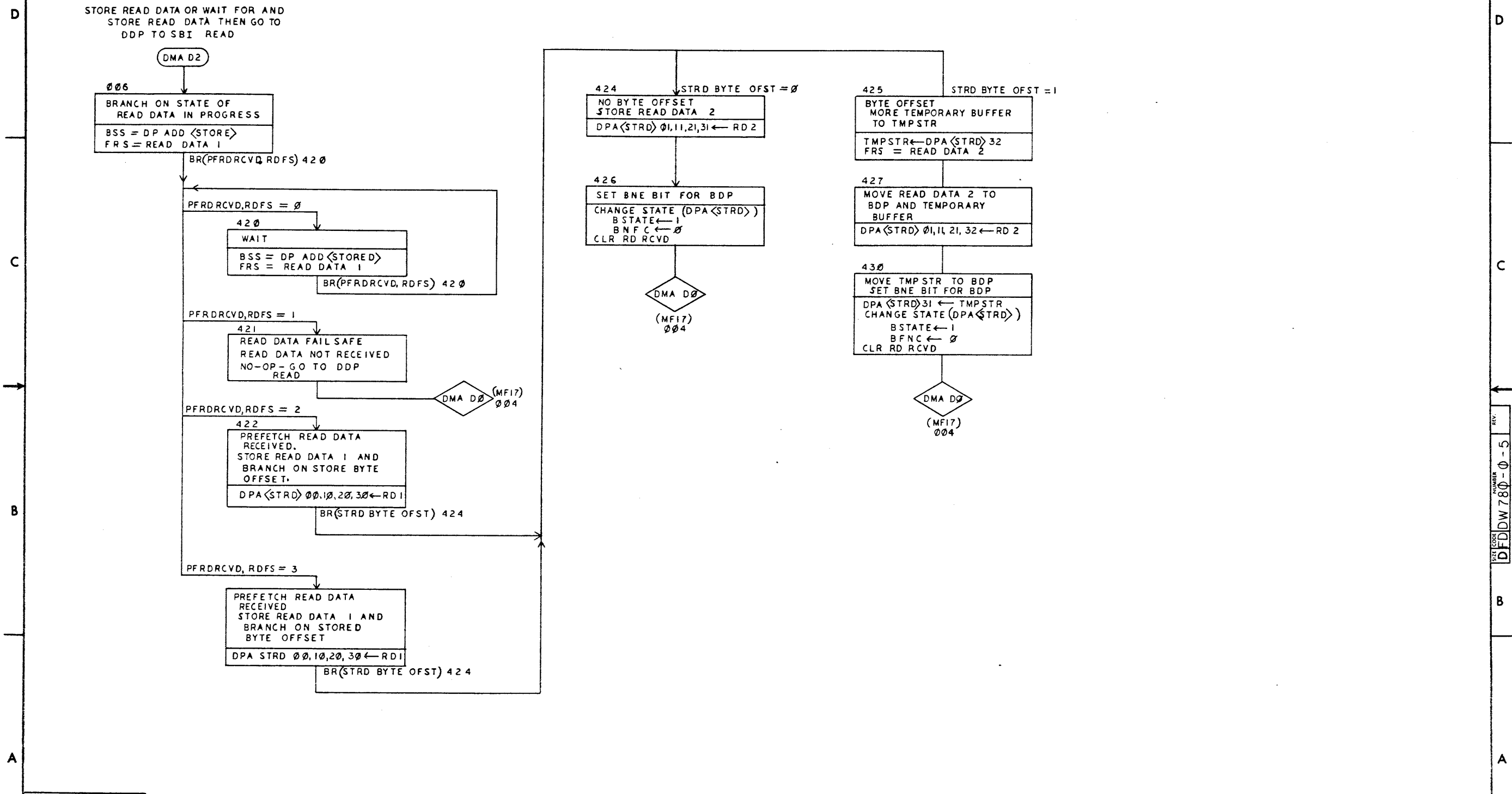
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

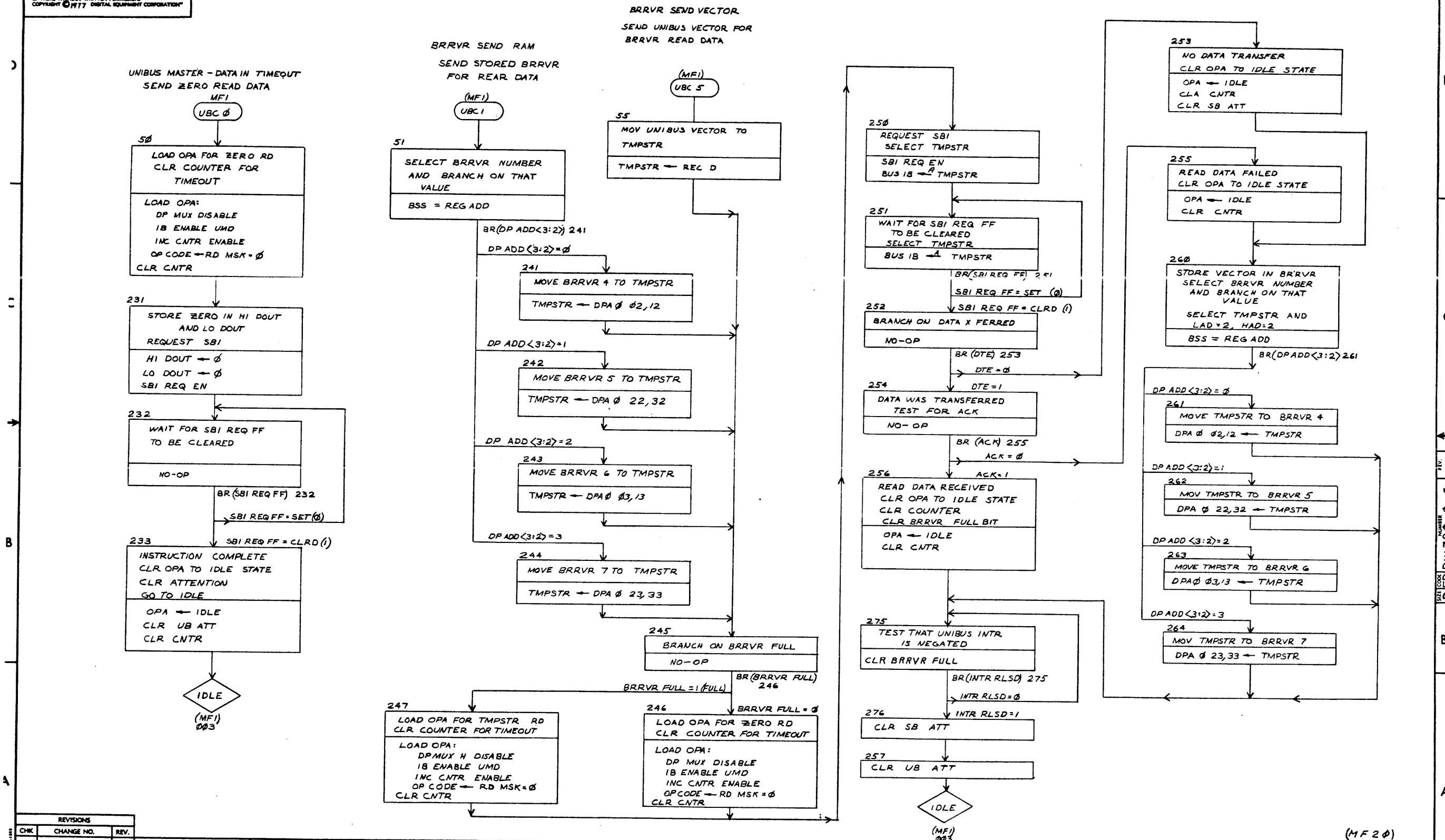
"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"



REVISIONS																		MF 19			
CHK	CHANGE NO.	REV.																TITLE	SIZE CODE	NUMBER	REV.
																		UBA MICRO FLOWS	DFD	DW780-0-5	
																		SCALE	SHEET 20 OF 27	DIST.	

REV. NUMBER DW780-0-5

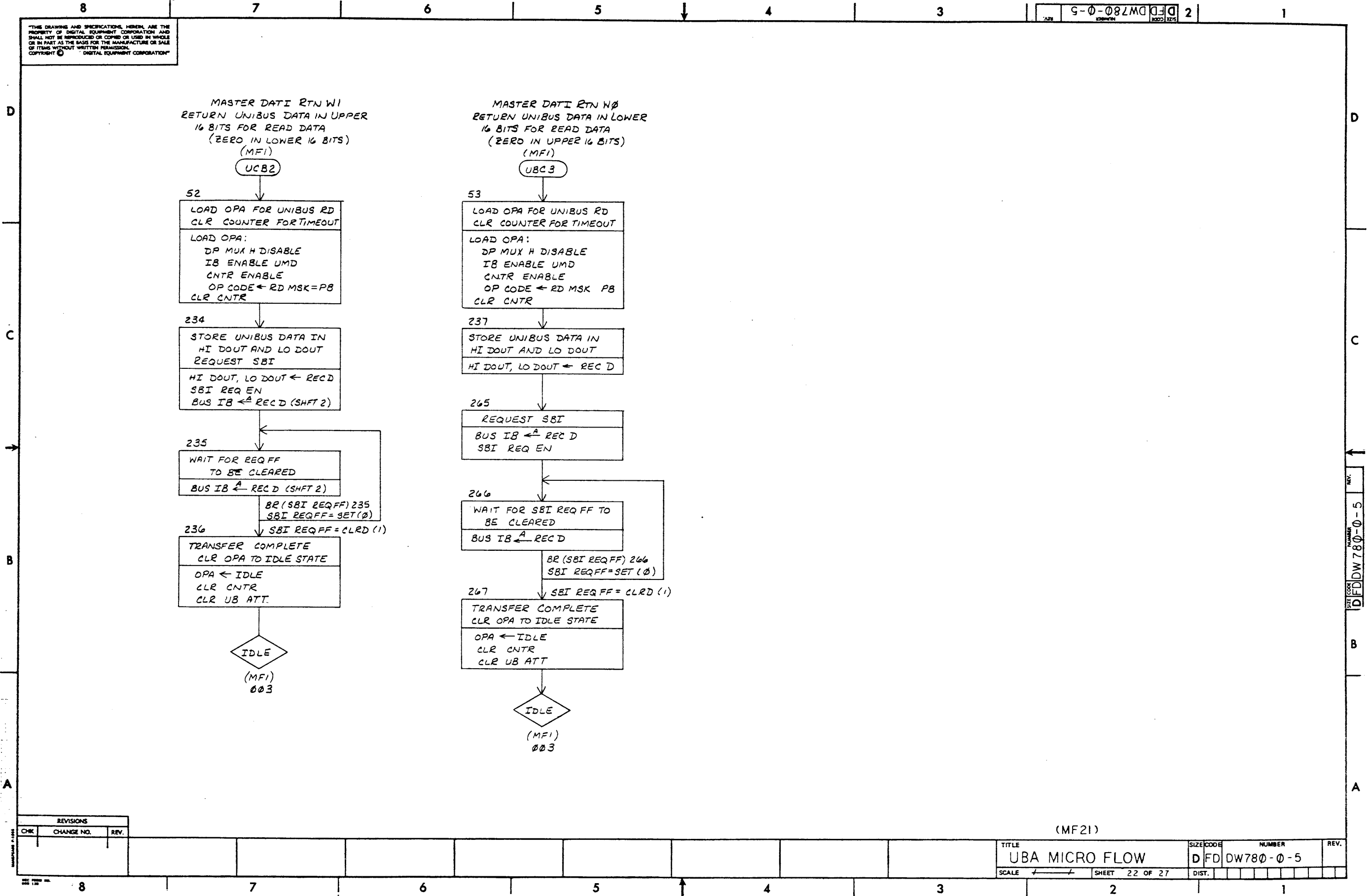
THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

REV. DW780-0-5

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREAFTER ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. DIGITAL EQUIPMENT CORPORATION

UAI READ
FUBAR, FMER, SR, CR - READ
(MFI)

SBI

61
LOAD OPA FOR UAI RD
CLEAR COUNTER FOR
TIMEOUT

LOAD OPA:
DP MUX DISABLE
IB ENABLE UAI
CNTR ENABLE
OP CODE ← RD MSK = 0

120
REQUEST SBI
SBI REQ EN

121
WAIT FOR SBI REQ FF
TO BE CLEARED
NO-OP

BR (SBI REQ FF) 121
SBI REQ FF = SET (0)

122
INSTRUCTION COMPLETE
CLR OPA TO IDLE STATE
OPA ← IDLE A
CLR SB ATT

SBI REQ FF = CLR (1)

IDLE
(MFI)
003

DPR READ
IF DPR 0 → SEND ZERO
IF DPR 1 → 15, SEND CONTENTS
(MFI)

SBI

62
SELECT BSS = REG ADD
AND BRANCH ON NON-ZERO
ADDRESS
BSS = REG ADD

BR (DPR 0) 123
(DPR 0) = 0

123
DPR 0 - SEND ZERO RD
LOAD OPA FOR ZERO RD
CLEAR CNTR FOR TIMEOUT
PREPARE FOR ROTATE

LOAD OPA:
DP MUX DISABLE
IB EN UMD
CNTR ENABLE
OP CODE RD MSK = 0
CLR CNTR
BSS = REG ADD
DSS = 2 (ROT 2)

127
REQUEST SBI
ROTATE DP RAM 2 BYTES
SBI REQ EN
BUS IB ← DPA (REG ADD) (ROT 2) 03,13,23,33

130
WAIT FOR SBI REQ FF
TO BE CLEARED
BUS IB ← DPA (REG ADD) 03,13,
(ROT 2) 23,33

BR (SBI REQ FF) 130
SBI REQ FF = SET (0)

131
CLR OPB
OPB ← IDLE B

COMMENT
DP REG 1 → 15: GET DP
STATE INFORMATION FROM
MSK AND STATE RAM ON
UCBJ AND COMBINE WITH
DP ADDRESS INFORMATION
IN DP RAM (UMD).
MICRO STATE 124, 125

124
ENABLE STATE AND MSK
ONTO AD BUS

LOAD OPB:
BUS AD ← UCB AD MUX
BSS = REG ADD

125
MOVE STATE AND MSK
TO DATA PATH RAM
DPA (REG ADD) 03,13 ← BUS AD

126
LOAD OPA FOR DPR RD
CLR CNTR FOR TIMEOUT
PREPARE FOR ROTATE

LOAD OPA:
IB ENABLE UMD
CNTR ENABLE
OP CODE ← RD MSK = 0
CLR CNTR
BSS = REG ADD
DSS = 2 (ROT 2)

BSRVR READ
(MFI)

SBI

63
SELECT BSS = REG ADD
AND BRANCH ON VALUE
SELECT DMS = DP RAM
BSS = REG ADD
DMS = DP RAM

BR (DP ADD (3:2)) 141

DP ADD (3:2) = 0

142
MOV BSRVR 4 TO TMPSTR
TMPSTR ← DPA 0 00,10

DP ADD (3:2) = 1

143
MOV BSRVR 5 TO TMPSTR
TMPSTR ← DPA 0 20,30

DP ADD (3:2) = 2

144
MOV BSRVR 6 TO TMPSTR
TMPSTR ← DPA 0 01,11

DP ADD (3:2) = 3

145
MOV BSRVR 7 TO TMPSTR
TMPSTR ← DPA 0 21,31

46
LOAD OPA FOR TMPSTR RD
CLR CNTR FOR TIMEOUT

LOAD OPA:
DP MUX H DISABLE
IB ENABLE UMD
CNTR ENABLE
OP CODE ← RD MSK = 0
CLR CNTR

147
REQUEST SBI
SBI REQ EN
BUS IB ← TMPSTR

150
WAIT FOR SBI REQ FF
TO BE CLEARED
BUS IB ← TMPSTR

BR (SBI REQ FF) 150
SBI REQ FF = SET (0)

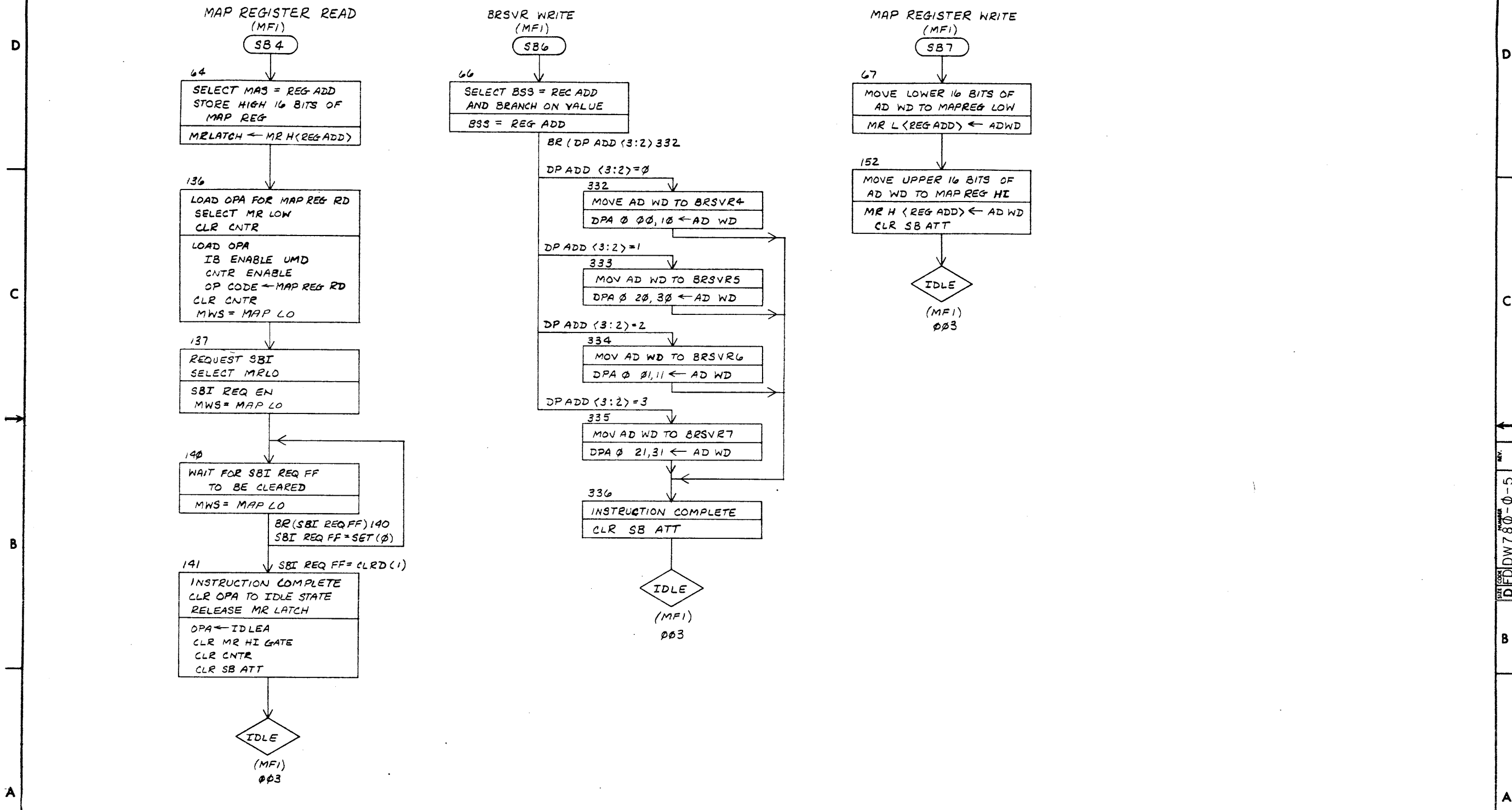
151
INSTRUCTION COMPLETE
CLR OPA TO IDLE STATE
OPA ← IDLE A
CLR SB ATT

SBI REQ FF = CLR (1)

IDLE
(MFI)
003

REVISIONS		
CHK	CHANGE NO.	REV.

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION"

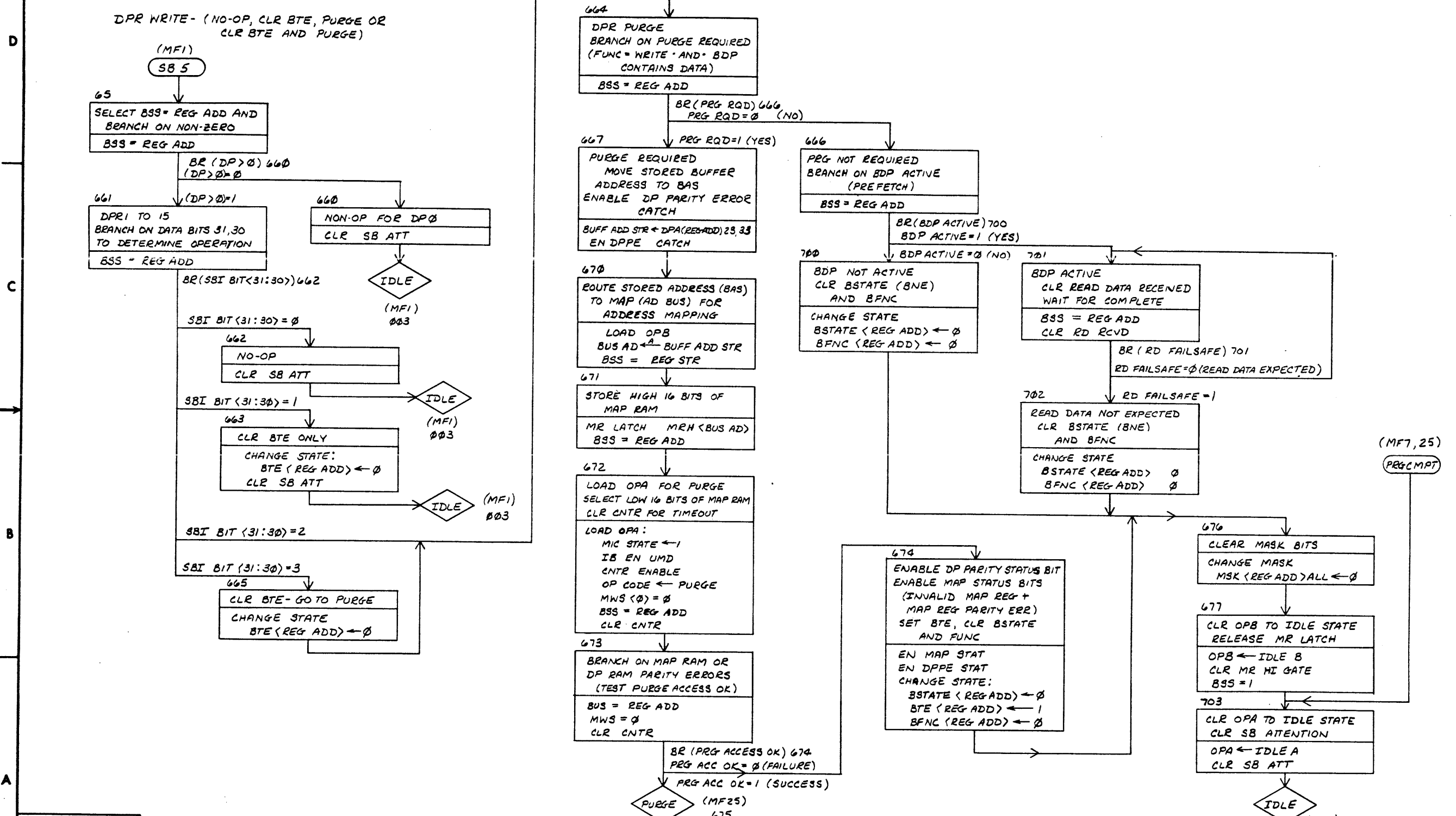


REVISIONS		
CHK	CHANGE NO.	REV.

(MF23)

TITLE	UBA MICRO FLOW	SIZE CODE	DFD	NUMBER	DW780-0-5	REV.	
SCALE	1:1	SHEET	24	OF	27	DIST.	

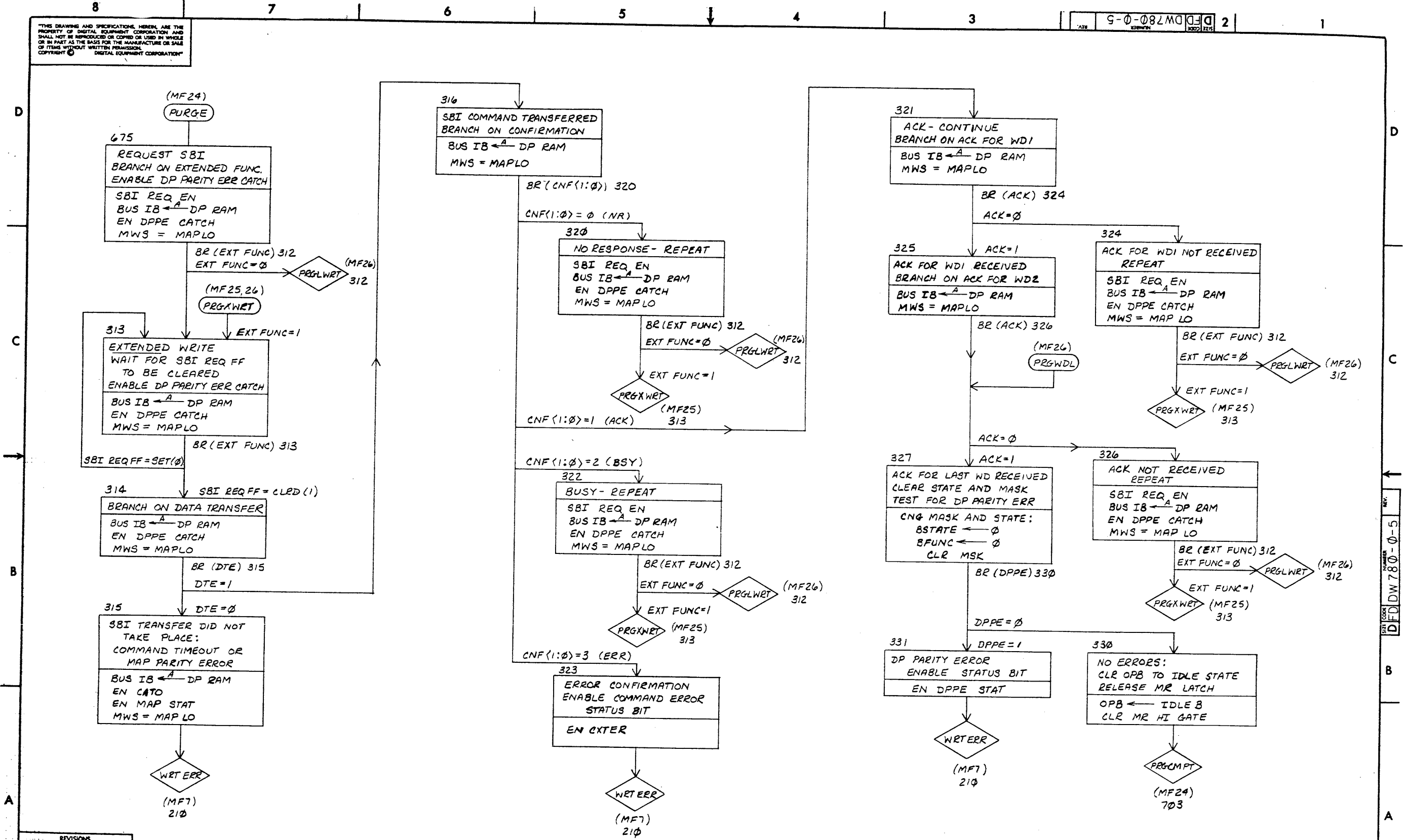
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

9-0-082M0 2



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SIZE CODE	NUMBER	REV.
UBA MICRO FLOW		D	FD DW780-0-5	
SCALE	SHEET	DIST.		
	26 OF 27			

DW780-0-5

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

(MF25, 26)
 PRGLWRT
 312
 PURGE WRITE LONG
 BUS IB ← A DP RAM
 EN DPPE CATCH
 MWS = MAP LO

341
 WAIT FOR REQ FF TO BE CLEARED
 BUS IB ← A DP RAM
 EN DPPE CATCH
 MWS = MAP LO

342
 BRANCH ON DATA TRANSFER ENABLE
 BUS IB ← A DP RAM
 EN DPPE CATCH
 MWS = MAP LO

343
 SBI TRANSFER DID NOT TAKE PLACE:
 COMMAND TIMEOUT OR MAP PARITY ERROR
 BUS IB ← A DP RAM
 EN CATO
 EN MAP STAT
 MWS = MAP LO

WRTErr
 (MF7)
 210

344
 SBI COMMAND TRANSFERRED
 BRANCH ON CONFIRMATION
 BUS IB ← A DP RAM
 MWS = MAP LO

BR (CNF<1:0>) 345
 CNF<1:0> = 0 (NR)

345
 NO RESPONSE - REPEAT
 SBI REQ EN
 BUS IB ← A DP RAM
 EN DPPE CATCH
 MWS = MAP LO

BR (EXT FUNC) 312
 EXT FUNC = 0
 PRGLWRT (MF26) 312

EXT FUNC = 1
 PRGXWRT (MF25) 313

CNF<1:0> = 1 (ACK)

346
 ACK CONFIRMATION
 BRANCH ON ACK FOR WDI
 BUS IB ← A DP RAM
 MWS = MAP LO

BR (ACK) 326
 PRGWDL (MF25) 326, 327

CNF<1:0> = 2 (BSY)

347
 BUSY - REPEAT
 SBI REQ EN
 BUS IB ← A DP RAM
 EN DPPE CATCH
 MWS = MAP LO

BR (EXT FUNC) EXT FUNC = 0
 PRGLWRT (MF26) 312

EXT FUNC = 1
 PRGXWRT (MF25) 313

CNF<1:0> = 3 (ERR)

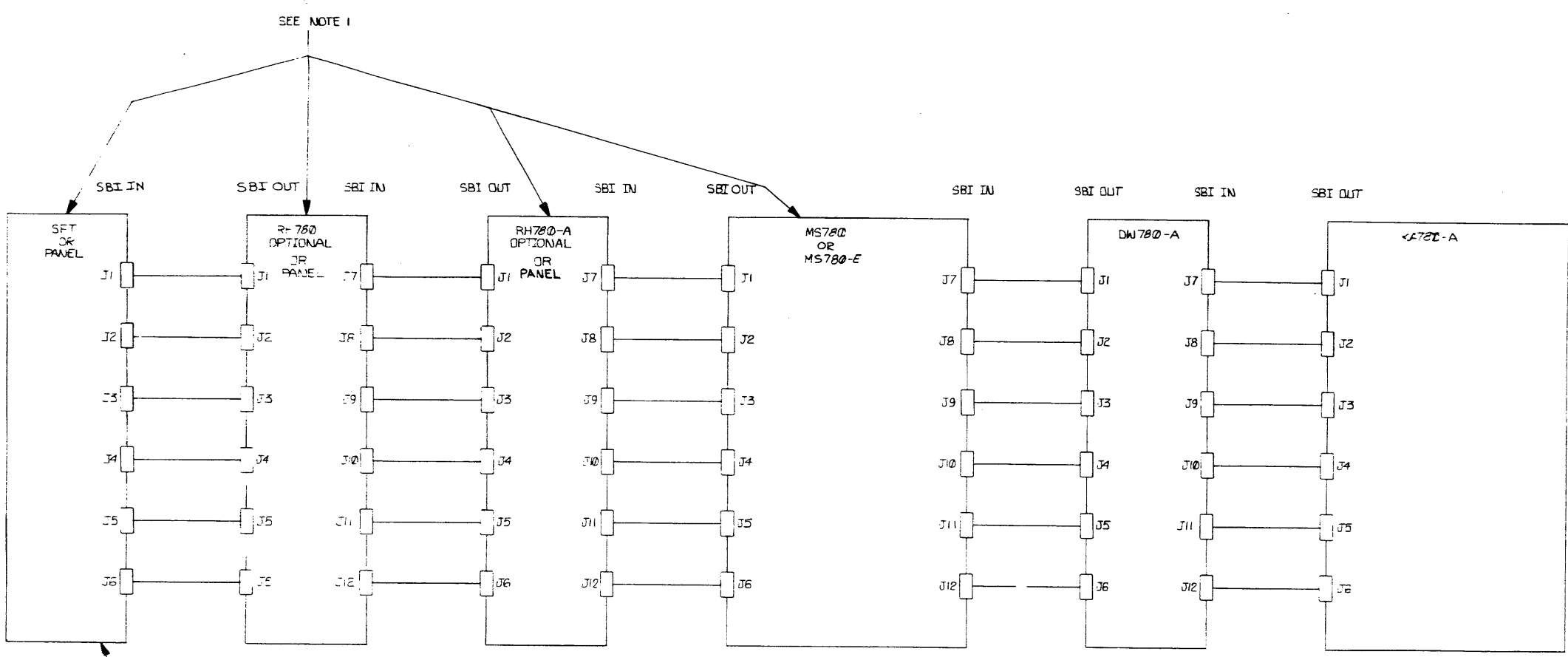
350
 ERROR CONFIRMATION
 ENABLE COMMAND ERROR STATUS BIT
 EN CXTER

WRTErr
 (MF7)
 210

REVISIONS		
CHK	CHANGE NO.	REV.

(MF26)		TITLE	SIZE CODE	NUMBER	REV.
UBA MICRO FLOW		DFD	DW780-0-5		
SCALE	SHEET	OF	DIST.		
	27	27			

"THIS DRAWING AND SPECIFICATIONS, GENERAL AND SPECIAL, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION"



SEE NOTE 2

NOTES:

- 1. 11780-C SYSTEM CONSISTS OF
 - A. KA780-A
 - B. DW780-A
 - C. MS780
 - D. SFT (# M9043)
 - E. 2 DUMMY PANELS (# 7418973)
- 11780-D SYSTEM CONSISTS OF
 - A. KA780-A
 - B. DW780-A
 - C. MS780
 - D. RH780-A
 - E. RH780
 - F. SFT
- 11780-EA, EC, ED SYSTEM CONSISTS OF
 - A. KA780-A
 - B. DW780
 - C. MS780-E
 - D. SFT (# M9043)
 - E. 2 DUMMY PANELS (# 7418973)

CONT:

- 11780-EK, EM, EN SYSTEM CONSISTS OF
 - A. KA780-A
 - B. DW780
 - C. MS780-E
 - D. RH780-A
 - E. RH780
 - F. SFT
- 2.) SBI CABLE CONNECTIONS TO SFT FROM ADJACENT BACKPLANE ARE ALWAYS 1700087-1 (QUANTITY 6) OTHER SBI CABLES ARE 1700087-0.

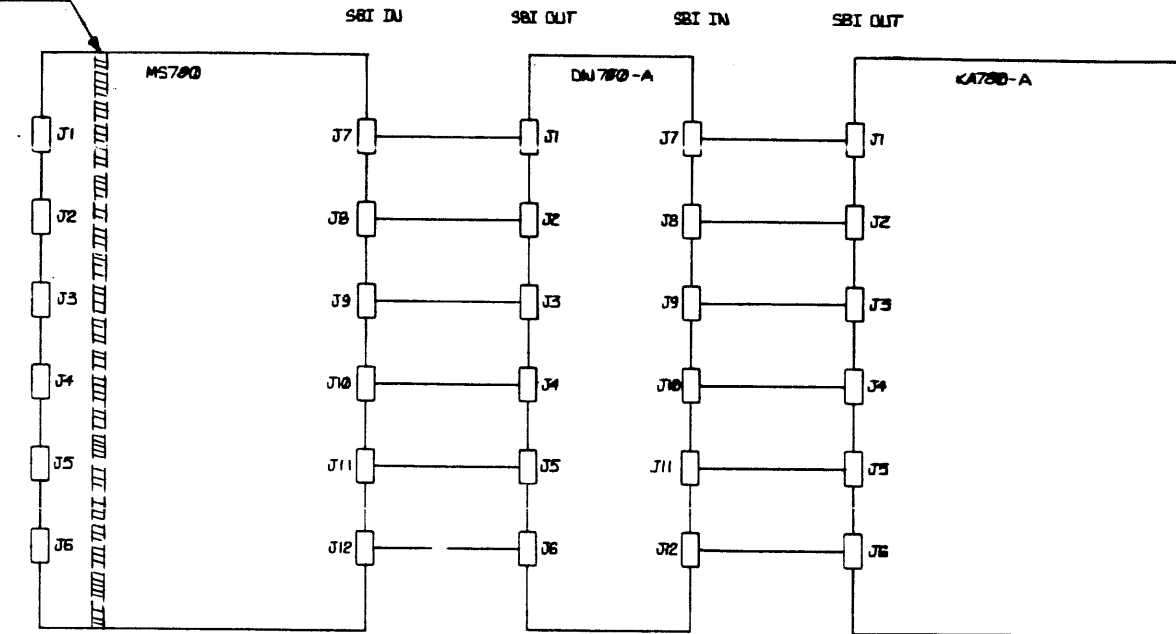
REV.	REV.
1	A
2	B
3	C
4	D
5	E
6	F
7	G
8	H

DRN. E. TAYLOR				26 JUL 77	FIRST USED ON	11780
CHK'D. X. GAGG				19 JUL 77	TITLE	
ENGR. ANT. S. 77				11780 SUB SYSTEM INTERCONN.		
PROJ. ENG. J. H. H. 77				PROD. R. S. 77		
NEXT HIGHER ASSY.				SIZE	CODE	NUMBER
R-DD-11780-0				D	IC	11780-0-3
SCALE				REV	€	
SHEET 1 OF 9				DIST.	TW 1	

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED BY ANY MEANS OR IN ANY FORM OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEMS WITHOUT THE WRITTEN PERMISSION OF DIGITAL EQUIPMENT CORPORATION © 1979

2 E-0-08211 2

SEE NOTE 1



- NOTES:
 1) 11780 CU*CV SYSTEM CONSISTS OF
 A. KA780 A
 B. DW780 A
 C. MS780
 D. TRM (M9040) MOUNTED IN SLOT* 1 OF MS780 BACKPLANE.

THIS SHEET FOR CU*CV VARIATIONS ONLY

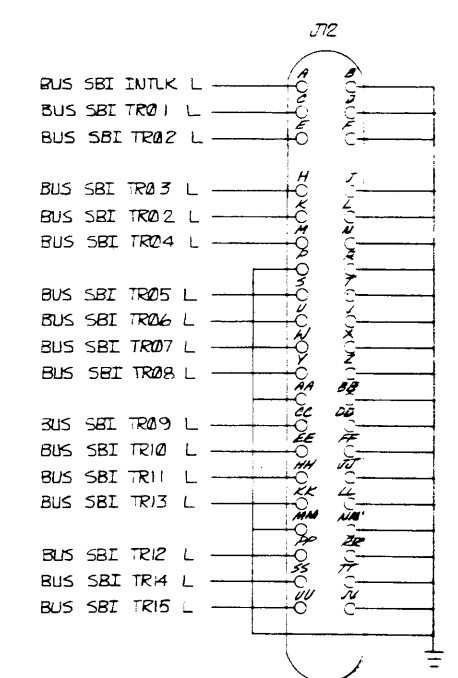
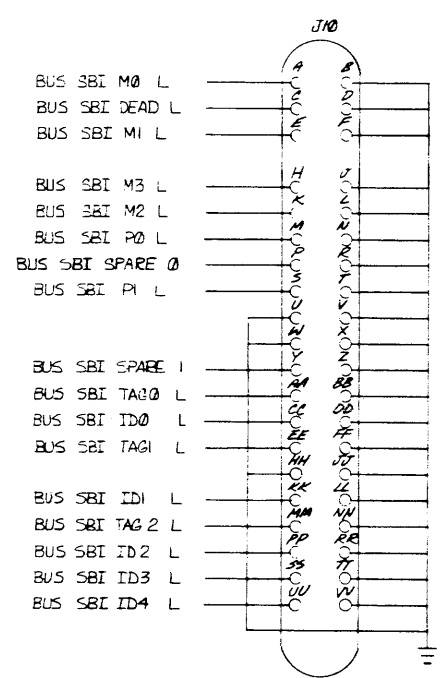
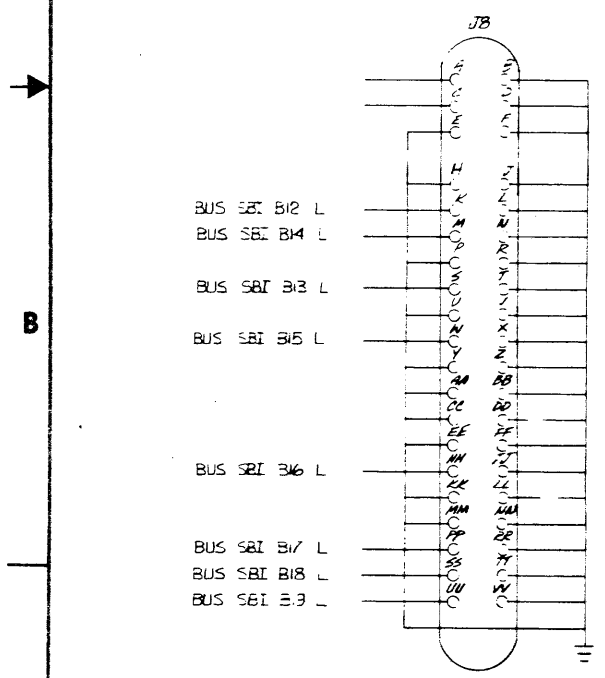
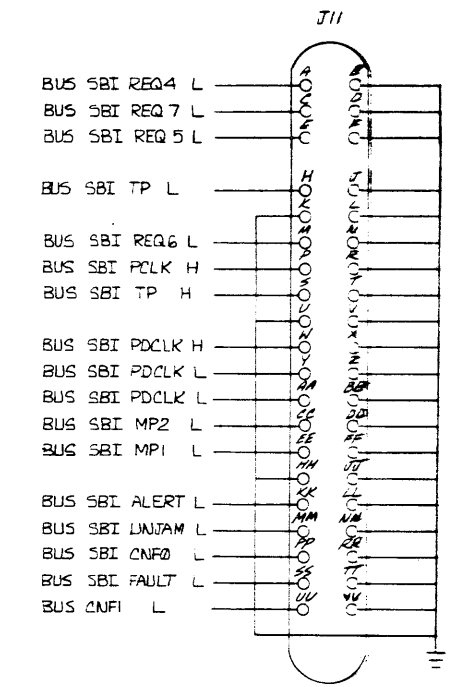
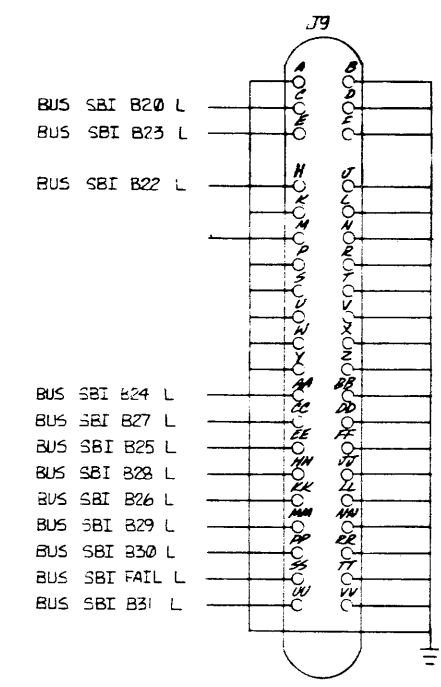
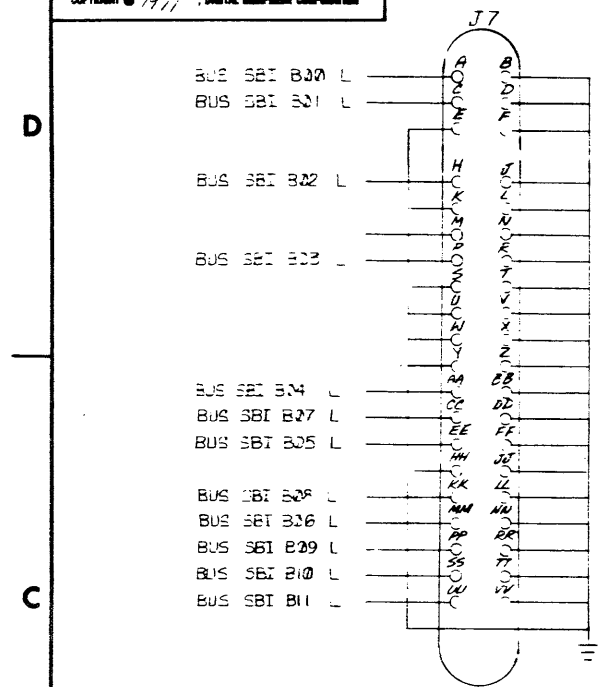
(BACKPLANE S.B.I. INTERCONNECT)			
DRN. E. LENNON 9/11/79	FIRST USED ON 11780	DIGITAL	
CHKD.		TITLE 11780 SUB SYSTEM INTERCONN.	
ENG.			
PROJ. ENG.			
PROD.			
NEXT HIGHER ASSY.			
R-00-11780-0	SIZE CODE D	NUMBER ILC 11780-0-3	REV. C
SCALE			
SHEET 2 OF 9	DIST.		

REV.	
CHG.	
NO.	

ILC 11780-0-3

TW 1

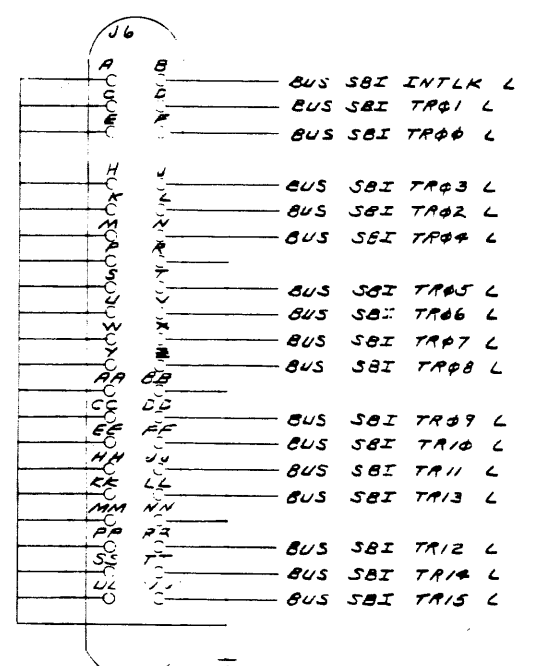
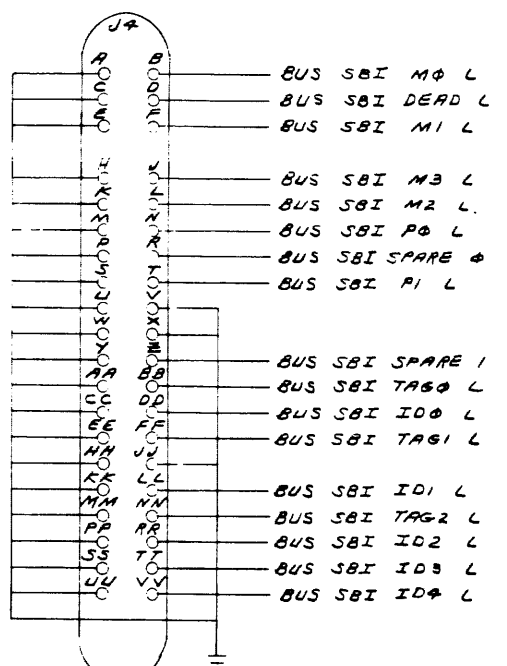
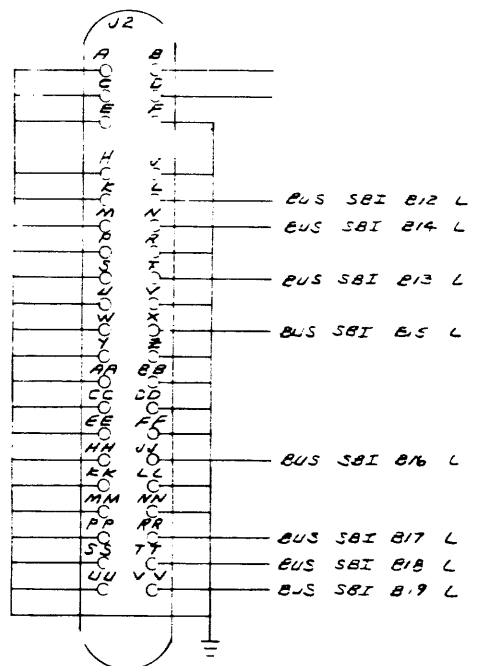
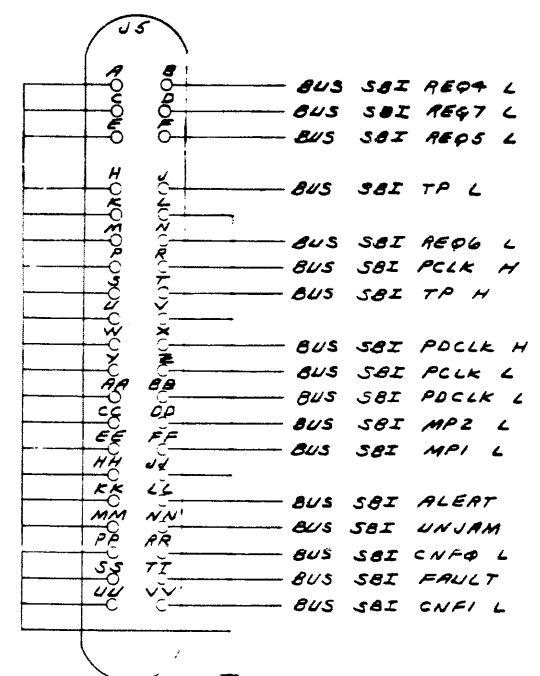
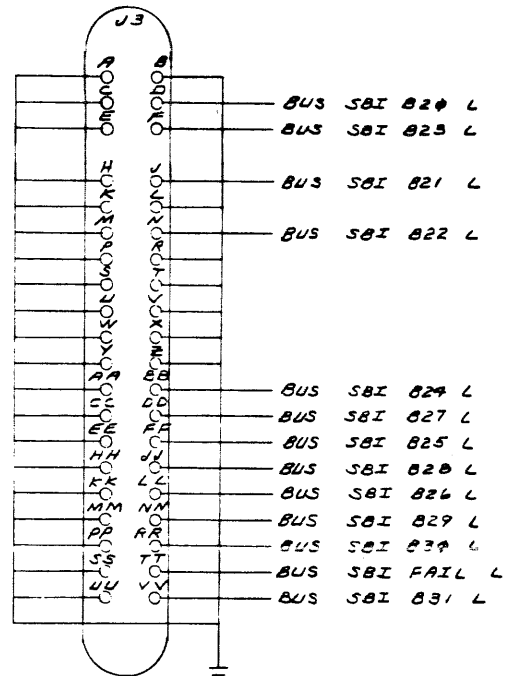
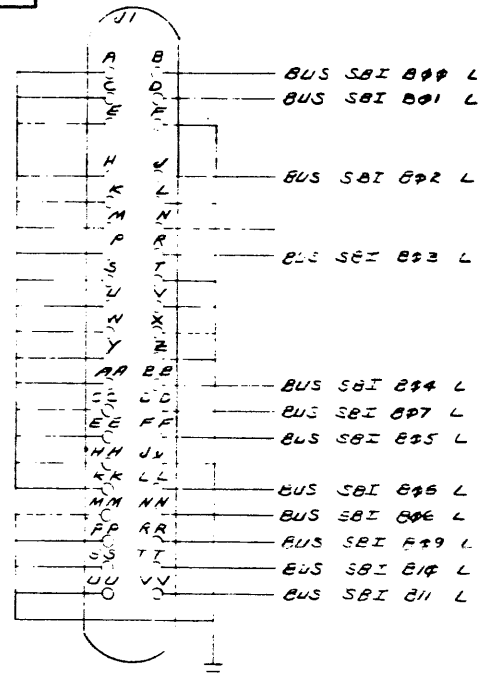
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION



REV.	
CHG	
CHK	
REVISIONS	
CHANGE NO.	

DRN. E. Taylor 25 Jul 77		FIRST USED ON		digital
CHK'D D. Hays 16 Aug 77		11780		
ENG. Ed. Davis 18 Oct 77		TITLE		
PROJ. ENG. J. Kelly 18 Oct 77		11780 SUB SYSTEM		
PROD. R. L. Ward 11-18-77		INTERCONNECT		
NEXT HIGHER ASSY.				
B-DD-11780		SIZE	CODE	NUMBER
SCALE		D	IC	11780-0-3
SHEET 3 OF 9		DIST.		REV. C

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION



REV.	
REVISIONS	
CHANGE NO.	
CHK	

(SBI OUT)		FIRST USED ON		digital	
DRN E. Taylor	25 Jun 77	11780			
CHK'D D. Gandy	19 Jul 77	TITLE			
ENG. Ed. Anttila	16 Sep 77	11780 SUB SYSTEM INTERCONNECT			
PROJ. ENG. R. S. 11-10-77		NEXT HIGHER ASSY.			
PROJ. R. S. 11-10-77		SIZE	CODE	NUMBER	REV.
		D	LC	11780-0-3	C
SCALE	+	DIST.			
SHEET	4 OF 9				

8

7

6

5

4

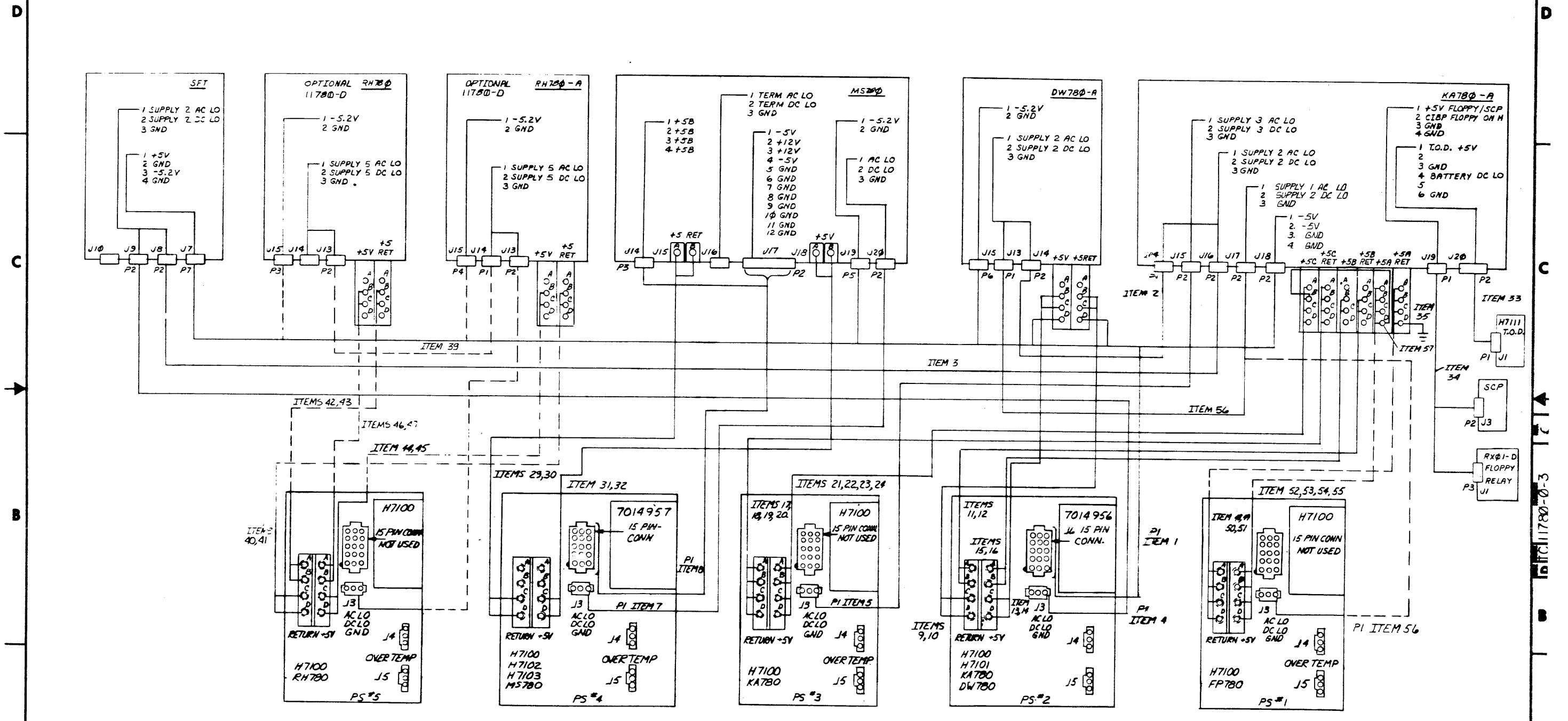
3

2

TW 1

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION.

NOTES:
1.) ITEM # 5 ARE SHOWN FOR REFERENCE IN LOCATING CABLE DESTINATIONS ONLY USING SHEET 7 D-IC-11780-0-3



SEE SHEET # 6 FOR REF. PARTS LIST.

(BACKPLANE D.C. INTERCONNECT)

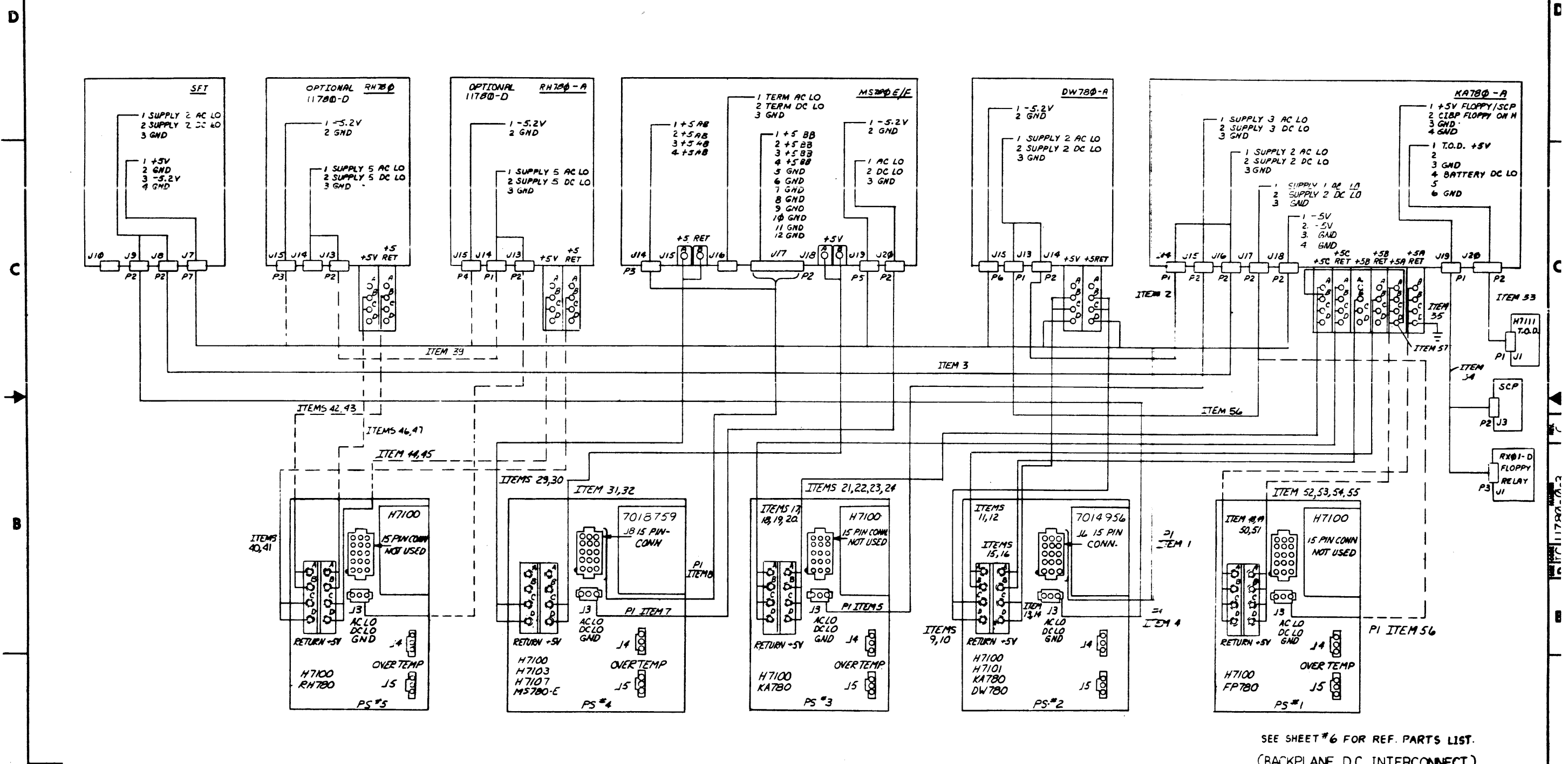
11780-C+D CONFIGURATIONS

ORIG. E. THOR	25 JUN 77	FIRST USED ON	11780
CHK'D BY	18 JUL 77	TITLE	11780 SUB SYSTEM INTERCONNECT
ENGR. Ed. Arden	20 JUL 77	PROJ. ENGR.	11-B-77
PROJ. ENGR.	11-B-77	NEXT HIGHER AUTH.	
SCALE	D	SIZE	D
SHEET	5 OF 9	CODE	IC 11780-0-3

REVISIONS
DATE
CHANGE NO.
REV.

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION

NOTES:
 1.) ITEM # 5 ARE SHOWN FOR REFERENCE IN LOCATING CABLE DESTINATIONS ONLY USING SHEET 7 D-12-11780-0-3



SEE SHEET #6 FOR REF. PARTS LIST.

(BACKPLANE D.C. INTERCONNECT)

11780-E CONFIGURATIONS

DRN. E. AWICK	25 JUN 77	FIRST LINED ON	11780
CHK'D BY G. J. ...	18 JUN 77	TITLE	11780 SUB SYSTEM INTERCONNECT
ENG. E. A. ...	20 JUN 77	PROJ. ENG. ...	11-0-77
PROD. R. ...	11-0-77	NEXT HIGHER ASSY.	
SCALE	4	SIZE CODE	D
SHEET	6 OF 9	NUMBER	11780-0-3
		REV.	C

REV.	
CHANGE NO.	
DATE	

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

11780 - E (SEE NOTE 4)
11780 - C & D (SEE SHEETS 7 & 8 FOR C, CV VARIATIONS)

11780 - D, EK, EM, EN

REF. ITEM NUMBER	PART NUMBER	DESCRIPTION	FROM	TO	REMARKS
1	7015073-0-0	HARNESS 5V TERMINAL	HARNESS P1	PS#2-J6	-5V GND
			HARNESS P2	KA780-J18	
			HARNESS P5	M5780-J19	
			HARNESS P6	DW780-J15	-5V, GND
			HARNESS P7	SFT-J7	-5V, GND
			HARNESS RING TERM (RED WIRE)	DW780+5V-D	+5V
	7015073-2-0	HARNESS 5V TERM	HARNESS RING TERM (RED WIRE)	DW780+5V-D	+5V RETURN
2	7014212-0H	CABLE AC DC LOW	CABLE P1	KA780-J14	
			CABLE P2	DW780-J14	
3	7014212-2M	CABLE AC DC LOW	CABLE P1	KA780-J16	
			CABLE P2	SFT-J8	
4	7014212-2M	CABLE AC DC LOW	CABLE P1	PS#2-J3	AC DC LOW GND
			P2	SFT-J9	
5	7014212-0M	CABLE AC DC LOW	CABLE P1	PS#3-J3	AC DC LOW & GND
			P2	KA780-J15	
7	7014212-1C	CABLE AC DC LOW	CABLE P1	PS#4-J3	AC DC LOW & GND
			P2	M5780-J20	
8	7014234-0K	CABLE +5B & +2	CABLE P1	PS#4-J7	+5B & +12
			P2	M5780-J17	
			P3	M5780-J14	
9	7014249-1A	CABLE POWER (BLK)	PS#2+5 RET-D	DW780+5 RET-B	PS#2+5 RETURN
10	7014249-1A	CABLE POWER (BLK)	PS#2+5 RET-C	DW780+5 RET-C	
11	7014249-1C	CABLE POWER (BLK)	PS#2+5 RET-B	KA780+5B RET-B	
12	7014249-1C	CABLE POWER (BLK)	PS#2+5 RET-A	KA780+5B RET-C	PS#2+5 RETURN
13	7014530-1A	CABLE POWER (RED)	PS#2+5 -D	DW780+5 -B	PS#2+5
14			C	DW780+5 -C	
15	7014530-1A	CABLE POWER (RED)	PS#2+5 -B	KA780+5B -C	
16	7014530-1A	CABLE POWER (RED)	PS#2+5 -A	KA780+5B -B	PS#2+5
17	7014249-1J	CABLE POWER (BLK)	PS#3+5 RET-D	KA780+5C RET-D	PS#3+5 RETURN
18			C	C	
19			B	B	
20	7014249-1J	CABLE POWER (BLK)	PS#3+5 RET-A	KA780+5C -A	PS#3+5 RETURN
21	7014530-1E	CABLE POWER (RED)	PS#3+5 -D	KA780+5C -D	PS#3+5 RETURN
22			C	C	
23			B	B	
24	7014530-1E	CABLE POWER (RED)	PS#3+5 -A	KA780+5C -A	
* 58	7019586-1K	CABLE +5B	CABLE P1	PS#4-J8	
			CABLE P2	M5780-J17	
			CABLE P3	M5780-J14	
29	7014250-0K	CABLE POWER	PS#4+5 RET-C	M5780-J16-A	PS#4+5 RETURN
30	7014250-0K	CR MEMORY BLK	PS#4+5 RET-D	M5780-J16-B	
31	7014529-0K	CABLE POWER	PS#4+5 -C	M5780-J18-A	PS#4+5V
32	7014529-0K	-E MEMORY (RED)	PS#4+5 -D	M5780-J18-B	
33	7014243-3M	CABLE TO T.O.D. BAT.	HARNESS P2	KA780-J20	
			P1	H7111-J1	
34	7014243-2I	FLOPPY RELAY	HARNESS P1	KA780-J19	
		SC PUR HARNESS	P2	SCP-J3	
			P3	RX01-J1	
35	7014249-0L	CABLE POWER (BLK)	KA780-A+5A RET-D	FRAME	
56	7014212-0M	CABLE AC/DC LO	CABLE P1	DW780-J13	SEE NOTE #3
			CABLE P2	KA780-J17	

REF. ITEM NUMBER	PART NUMBER	DESCRIPTION	FROM	TO	REMARKS
1	7015073-0-0	HARNESS 5V TERM.	HARNESS P3	R-250-J15	-5V GND
1	7015073-0-0	HARNESS 5V TERM	HARNESS P4	R-250-A-J15	-5V GND
38	7014212-0M	CABLE AC DC LOW	CABLE P1	PS#5-J3	AC DC LO & GND
	7014212-0M	CABLE AC DC LOW	CABLE P2	R-250-J13	AC DC LO & GND
39	7014212-0H	CABLE AC DC LOW	CABLE P1	R-250-A-J14	AC DC LO & GND
	7014212-0H	CABLE AC DC LOW	CABLE P2	R-250-J13	AC DC LO & GND
40	7014249-0L	CABLE POWER (BLK)	PS#5+5 RET-D	R-250-A+5 RET-C	PS#5+5 RETURN
41			C	B	
42	7014249-0L	CABLE POWER (BLK)	PS#5+5 RET-B	R-250-A+5 -C	PS#5+5 RETURN
43			A	B	
44	7014530-0L	CABLE POWER (RED)	PS#5+5 -D	R-250-A+5 -C	PS#5+5V
45			C	B	
46	7014530-0L	CABLE POWER (RED)	PS#5+5 -B	R-250+5 -C	PS#5+5V
47			A	B	

FP780
OR
FP780 & KU780 SEE NOTE 1

48	7014249-0L	POWER CABLE BLK	PS#1+5 A RET-D	KA780-A+5A RET-D	PS#1+5 RETURN
49			C	C	
50			B	B	
51	7014249-0L	POWER CABLE (BLK)	PS#1+5 A RET-A	KA780-A+5A RET-A	PS#1+5 RETURN
52	7014530-0L	POWER CABLE (RED)	PS#1+5 -D	KA780-A+5A -D	PS#1+5V
53			C	C	
54			B	B	
55	7014530-0L	POWER CABLE (RED)	PS#1+5 -A	KA780-A+5A -A	PS#1+5V
56	7014212-0M	CABLE AC DC LO	CABLE P1	PS#1-J3	AC, DC, LOW
			P2	KA780-J17	

SEE NOTE 3

OPTIONAL

KC780 or KU780 SEE NOTE 2

57	7014530-0L	CABLE POWER (RED)	KA780-A+5A -D	KA780-A+5C -B	PS#2+5V
----	------------	-------------------	---------------	---------------	---------

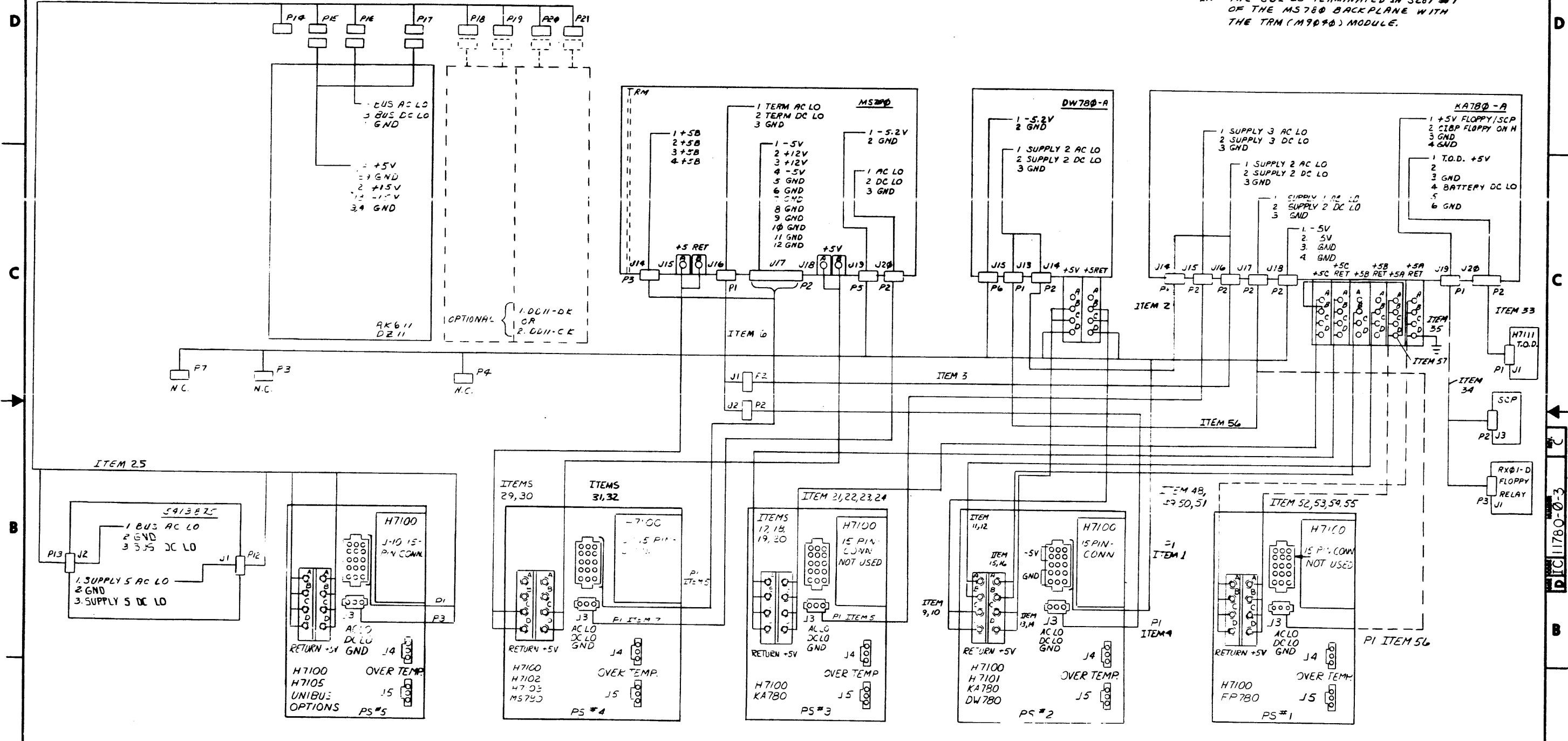
NOTES:

- REFER TO E-UA-KA780 FOR INSTRUCTIONS OF JUMPER REMOVAL IN CONFIGURATIONS USING PS#1.
- IF THE FP780 IS INSTALLED REMOVE ITEM 57.
- IF THE FP780 IS INSTALLED; ITEM #56 P1 CONNECTS TO PS#1-J3. OTHERWISE IT IS CONNECTED TO DW780-J13.
- 11780-E VARIATIONS MUST USE ITEM 58 IN PLACE OF ITEM 8.

REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREAFTER ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1979, DIGITAL EQUIPMENT CORPORATION

- NOTES:
- ITEM # 5 ARE SHOWN FOR REFERENCE IN LOCATING CABLE DESTINATIONS ONLY USING SHEET 9 D-IC-11780-0-3
 - THE SBI IS TERMINATED IN SLOT #1 OF THE MS780 BACKPLANE WITH THE TRM (M9090) MODULE.



SEE SHEET # 8 FOR REF. PARTS LIST.
(BACKPLANE D.C. INTERCONNECT)

THIS SHEET FOR CU,CV VARIATIONS ONLY.

REV.	
CHK	
DATE	

TITLE	11780 SUB SYSTEM INTERCONNECT	SIZE CODE	DIC	NUMBER	11780-0-3	REV.	C
SCALE	1:1	SHEET	8	OF	9	DIST.	

TW 1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1980 DIGITAL EQUIPMENT CORPORATION

11780-CU/CV

11780-CJ/CV

REF ITEM NUMBER	PART NUMBER	DESCRIPTION	FROM	TO	REMARKS
1	705073-0-0	HARNESS-5V TERMINATOR	HARNESS - P1	PS*2 - J6	-5V GND
			HARNESS - P2	KA780-J18	
			HARNESS - P5	M5780-J19	
			HARNESS - P6	DW780-J15	-5V GND
			HARNESS - P7	N.C.	±5V GND
			HARNESS RING TERM. (RED WIRE)	DW780+5V-D	-5V
	705073-0-0	HARNESS-5V TERMINATOR	HARNESS RING TERM. (BLK WIRE)	DW780+5V RT-D	+5V RETURN
2	701422-0-H	CABLE AC DC LOW	CABLE - P1	KA780-J14	AC,DC LOW+GND
			CABLE - P2	DW780-J14	
3	701422-2M	CABLE AC DC LOW	CABLE - P1	KA780-J16	AC,DC LOW+GND
			CABLE - P2	ITEM*0-J1	
4	701422-2M	CABLE AC DC LOW	CABLE - P1	PS*2 - J3	AC,DC LOW+GND
			CABLE - P2	ITEM*0-J2	
5	701422-0-V	CABLE AC DC LOW	CABLE - P1	PS*3 - J3	AC,DC LOW+GND
			CABLE - P2	KA780-J15	
	70	-0-U	AC DC LOW WYE CABLE	M5780-J16	AC,DC LOW+GND
			CABLE - J1	ITEM*3-P2	
			CABLE - J2	ITEM*4-P2	
7	701422-1-C	CABLE AC DC LOW	CABLE - P1	PS*4 - J3	AC,DC LOW+GND
			CABLE - P2	M5780-J20	
8	701422-0-K	CABLE ±5B +12V	CABLE - P1	PS*4 - J7	±5B+12V-GND
			CABLE - P2	M5780-J17	
			CABLE - P3	M5780-J14	
9	704249-1A	CABLE POWER (BLK)	PS*2 +5 RET -D	DW780+5 RET-B	PS*2+5 RETURN
10	704249-1A	CABLE POWER (BLK)	PS*2 +5 RET -C	DW780+5 RET-C	
11	704249-1C	CABLE POWER (BLK)	PS*2 +5 RET -B	KA780+5B RET-B	
12	704249-1C	CABLE POWER (BLK)	PS*2 +5 RET -A	KA780+5B RET-C	PS*2 +5 RETURN
13	704530-1A	CABLE POWER (RED)	PS*2 +5V -D	DW780+5V-B	PS*2 +5V
14	704530-1A	CABLE POWER (RED)	PS*2 +5V -C	DW780+5V-C	
15	704530-1A	CABLE POWER (RED)	PS*2 +5V -B	KA780+5B-C	
16	704530-1A	CABLE POWER (RED)	PS*2 +5V -A	KA780+5B-B	PS*2 +5V
17	7014249-1J	CABLE POWER (BLK)	PS*3 +5V RET -D	KA780+5C RET-D	
18			-C	-C	
19			-B	-B	
20	704249-1J	CABLE POWER (BLK)	PS*3 +5V RET -A	KA780+5C RET-A	PS*3 +5 RETURN
21	7014530-1E	CABLE POWER (RED)	PS*3 +5V -D	KA780+5C -D	PS*3 +5 RETURN
22			-C	-C	
23			-B	-B	
24	704530-1E	CABLE POWER (RED)	PS*3 +5V -A	KA780+5C -A	
25	7016951-0-0	UNIBUS PWR HARNESS	HARNESS - P1	PS*5 - J10	PS*5+15V-15V+GND
			HARNESS RING TERM. (BLK WIRE) -P2	PS*5 +5 RET -D	PS*5 +5 RETURN
			HARNESS - P3	PS*5 - J3	AC,DC LOW +GND
			HARNESS RING TERM. (RED WIRE) -P4	PS*5 +5V -D	PS*5 -5V
			-P5	-C	
			-P6	-B	
			HARNESS RING TERM. (RED WIRE) -P7	PS*5 +5V -A	
			HARNESS RING TERM. (BLK WIRE) -P8	PS*5 +5 RET-D	PS*5 +5 RETURN
			-P9	-C	
			-P10	-B	
			HARNESS RING TERM. (BLK WIRE) -P11	PS*5 +5 RET-A	
	7016951-0-0	UNIBUS PWR HARNESS	HARNESS - P12	ADAPTER BOARD-J1	AC,DC LOW + GND

REF ITEM NUMBER	PART NUMBER	DESCRIPTION	FROM	TO	REMARKS
25	7016951-0-0	UNIBUS PWR HARNESS	HARNESS - P13	ADAPTER BOARD-J2	ADAPT. AC,DC LOW+GND
			-P14	N.C.(OPTIONAL)	
			-P15	RK611 - P2	
			-P16	RK611 - P3	
			-P17	RK611 - P4	
			-P18	N.C.(OPTIONAL)	
			-P19		
			-P20		
	7016951-0-0	UNIBUS PWR HARNESS	HARNESS - P21	N.C.(OPTIONAL)	
29	7014250-0K	CABLE POWER RTR MEMORY (BLK)	PS*2 -5V RET -C	M5780-J15-A	PS*4 +5 RETURN
30			-D	-B	
31	7014529-0K	CABLE POWER +5 MEMORY (RED)	PS*2 -5V -C	M5780-J18-A	PS*4 +5V
32			-D	-B	
33	7014243-3M	CABLE TO T.Q.D. BAT.	HARNESS - P2	KA780-J20	
			-P1	H7111 - J1	
34	7014243-21	FLOPPY RELAY 5C PWR HARNESS	HARNESS - P1	KA780-J19	
			-P2	SCP - J3	
			-P3	RX01 - J1	
35	7014249-0L	CABLE POWER (BLK)	KA780 -5A RET -D	FRAME	
56	7014212-0M	CABLE AC/DC LO	CABLE - P1	DW780 - J13	SEE NOTE *3
			CABLE - P2	KA780 - J17	

FP780 OR FP780 + KU780

SEE NOTE 1

48	7014249-0L	POWER CABLE (BLK)	PS*1 -5A RET -D	KA780+5A RET-D	PS*1 +5 RETURN
49			-C	-C	
50			-B	-B	
51	7014249-0L	POWER CABLE (BLK)	PS*1 -5A RET -A	KA780+5A RET-A	
52	7014530-0L	POWER CABLE (RED)	PS*1 -5V -D	KA780+5A -D	PS*1 +5A
53			-C	-C	
54			-B	-B	
55	7014530-0L	POWER CABLE (RED)	PS*1 -5V -A	KA780+5A -A	
56	7014212-0M	CABLE AC DC LO	CABLE - P1	PS*1 - J3	AC,DC LOW+GND
			CABLE - P2	KA780 - J17	

OPTIONAL SEE NOTE 3

KC780 → KJ780

SEE NOTE 2

57	7014530-0L	CABLE POWER (RED)	KA780 -5A -D	KA780+5C -B	PS*2 +5V
----	------------	-------------------	--------------	-------------	----------

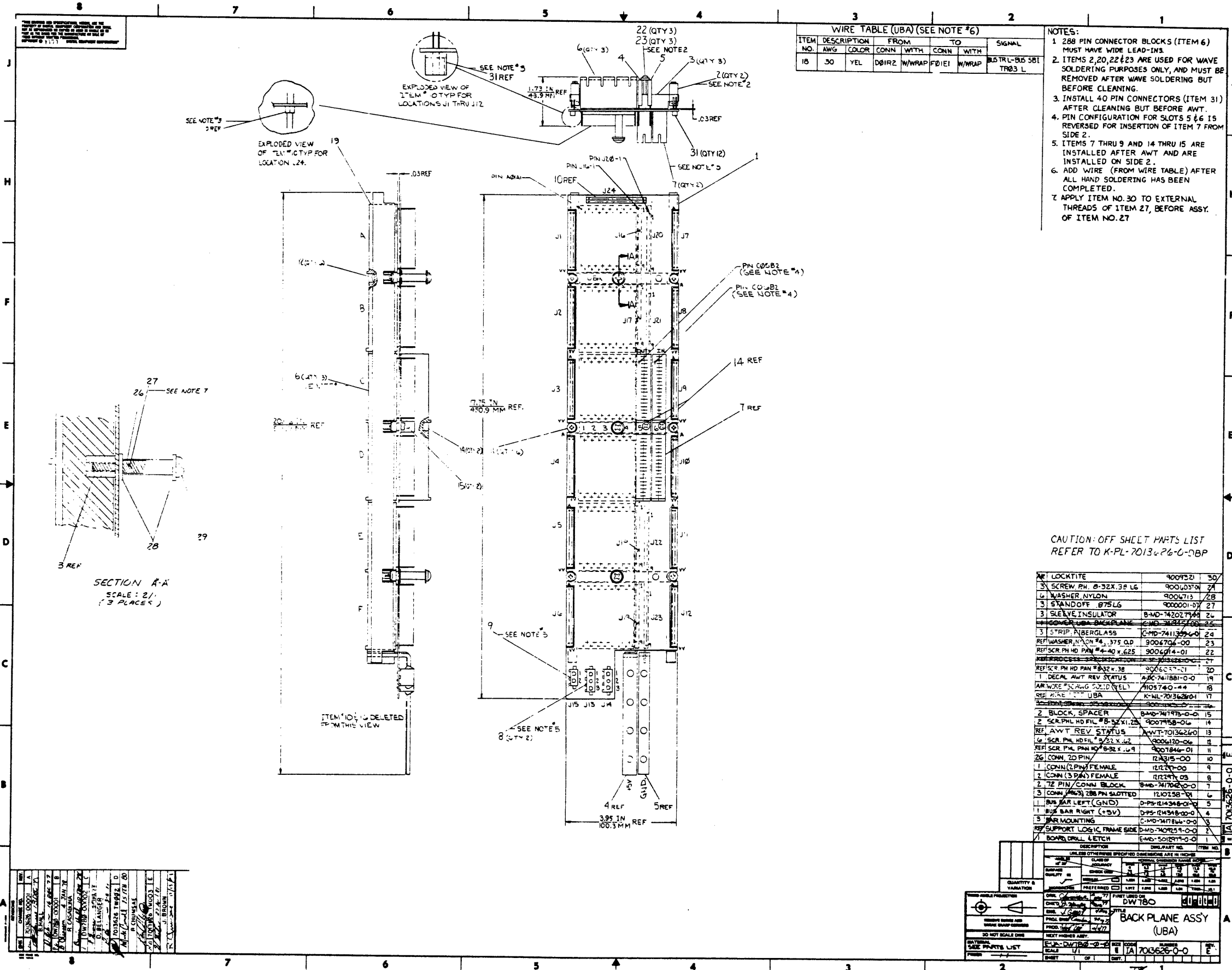
NOTES:

- REFER TO E-UA-KA780 FOR INSTRUCTIONS OF JUMPER REMOVAL IN CONFIGURATIONS USING PS*1.
- IF THE FP780 IS INSTALLED, REMOVE ITEM 57.
- IF THE FP780 IS INSTALLED: ITEM *56 P1 CONNECTS TO PS*1-J3 OTHERWISE IT IS CONNECTED TO DW780 - J13.

THIS SHEET FOR CU+CV VARIATION ONLY

REVISION HISTORY		
DATE	ECC NUMBER	REV

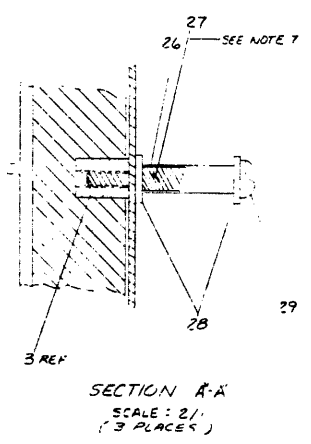
TITLE						DOCUMENT NUMBER			
11780 SUB-SYSTEM INTERCONNECT						SIZE	CODE	NUMBER	REV.
						DIC		11780-0-3	C
						SCALE		SHEET 9 OF 9	



WIRE TABLE (UBA) (SEE NOTE #6)

ITEM NO.	AWG	COLOR	CONN	WITH	CONN	WITH	SIGNAL
18	30	YEL	D81R2	W/WRAP	F01E1	W/WRAP	BUS TR1-BUS SBT TR03 L

- NOTES:
- 288 PIN CONNECTOR BLOCKS (ITEM 6) MUST HAVE WIDE LEAD-INS.
 - ITEMS 2, 20, 22 & 23 ARE USED FOR WAVE SOLDERING PURPOSES ONLY, AND MUST BE REMOVED AFTER WAVE SOLDERING BUT BEFORE CLEANING.
 - INSTALL 40 PIN CONNECTORS (ITEM 31) AFTER CLEANING BUT BEFORE AWT.
 - PIN CONFIGURATION FOR SLOTS 5 & 6 IS REVERSED FOR INSERTION OF ITEM 7 FROM SIDE 2.
 - ITEMS 7 THRU 9 AND 14 THRU 15 ARE INSTALLED AFTER AWT AND ARE INSTALLED ON SIDE 2.
 - ADD WIRE (FROM WIRE TABLE) AFTER ALL HAND SOLDERING HAS BEEN COMPLETED.
 - APPLY ITEM NO. 30 TO EXTERNAL THREADS OF ITEM 27, BEFORE ASSY. OF ITEM NO. 27.



CAUTION: OFF SHEET PARTS LIST REFER TO K-PL-7013-26-0-DBP

1	LOCKTITE	9009321	30
2	SCREW PH. 8-32X.38 LG	90040370	24
4	WASHER NYLON	9004713	28
3	STANDOFF Ø75LG	9000001-07	27
3	SLEEVE INSULATOR	B-MD-14202744	24
3	COVER UBA BACKPLANE	C-MD-3624522	22
3	STRIP FIBERGLASS	C-MD-7411324-0	24
REF	WASHER NYLON #4, 375 O.D.	9004704-00	23
REF	SCR PH HD PAN #4-40 X.625	9004714-01	22
REF	PROCESS SPECIFICATION	SP-8012320	27
REF	SCR PH HD PAN #8-32 X.38	9006297-21	20
1	DECAL AWT REV STATUS	A-B-C-741881-0-0	19
AW	WIRE SCALG SOLID (YEL)	A105740-44	18
REF	WIRE UBA	K-WL-701362601	17
2	BLOCK, SPACER	B-MD-74195-0-0	15
2	SCR PH HD FIL #8-32X.25	9007458-06	14
REF	AWT REV STATUS	A-WT-70136260	13
6	SCR PH HD FIL #8-32 X.42	9004120-06	11
REF	SCR PH HD PAN #8-32 X.49	9007844-01	11
26	CONN, 20 PIN	121315-00	10
1	CONN (2 PIN) FEMALE	121271-00	9
2	CONN (3 PIN) FEMALE	121271-03	8
2	72 PIN/CONN BLOCK	B-MD-741702-0-0	7
3	CONN (4x3) 288 PIN SLOTTED	1210758-01	6
1	BUS BAR LEFT (GND)	D-PS-121348-0-0	5
1	BUS BAR RIGHT (+5V)	D-PS-121348-0-0	4
3	BAR MOUNTING	C-MD-741844-0-0	3
REF	SUPPORT LOGIC FRAME SIDE	B-MD-7409259-0-0	1
1	BOARD DRILL LETCH	E-MD-501871-0-0	1

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

QUANTITY & VARIATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (ITEM NO.)

DATE: 10/15/70

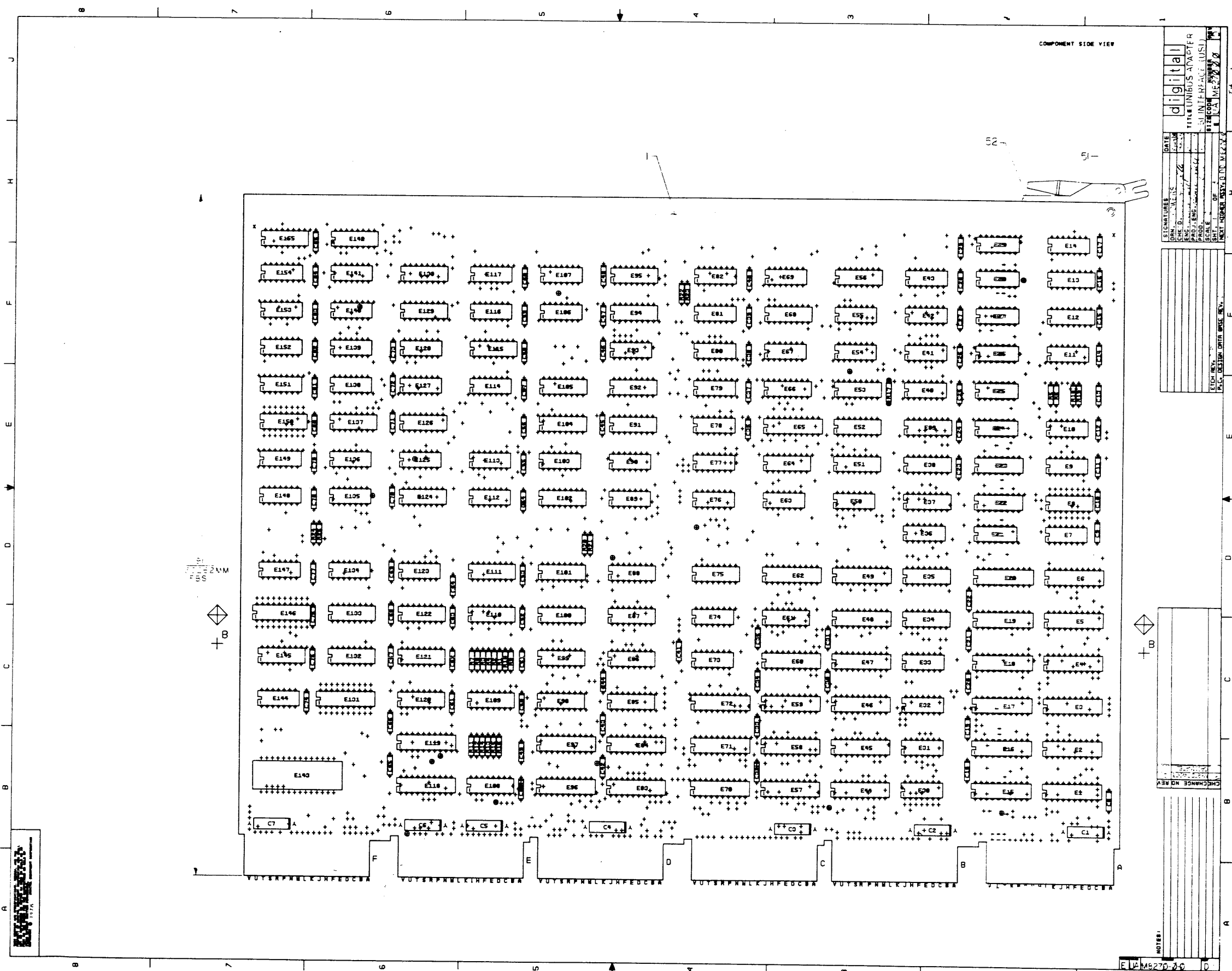
SCALE: 1/1

7005626-0-0

BACK PLANE ASSY (UBA)

7005626-0-0

COMPONENT SIDE VIEW



DATE	
DESIGNED BY	
CHK. BY	
ENG. BY	
PROJ. NO.	
SCALE	
SHEET NO.	
TOTAL SHEETS	
REV.	
DATE	
BY	
REASON	

REVISION	
DATE	
BY	
REASON	
REVISION	
DATE	
BY	
REASON	
REVISION	
DATE	
BY	
REASON	

NOTES:

1. CHANGE NO. REV.

2. CHANGE NO. REV.

3. CHANGE NO. REV.

4. CHANGE NO. REV.

5. CHANGE NO. REV.

6. CHANGE NO. REV.

7. CHANGE NO. REV.

8. CHANGE NO. REV.

9. CHANGE NO. REV.

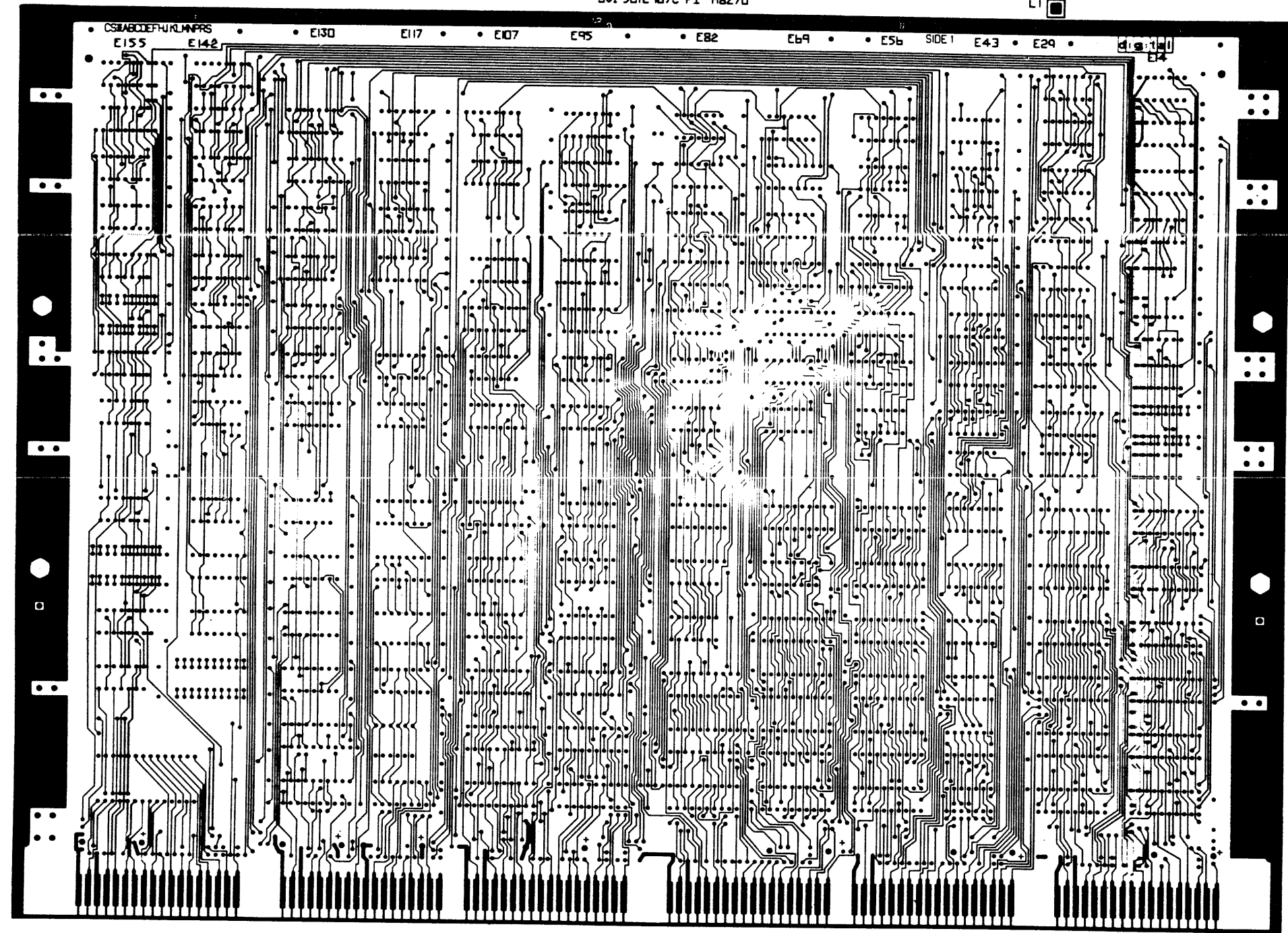
10. CHANGE NO. REV.

EUC 148270-20

THIS DRAWING IS UNCLASSIFIED
DATE 08-14-2013 BY 60322 UCBAW/SJS/STP

LAYER 1
USI 5012967C-P1 M8270

L1

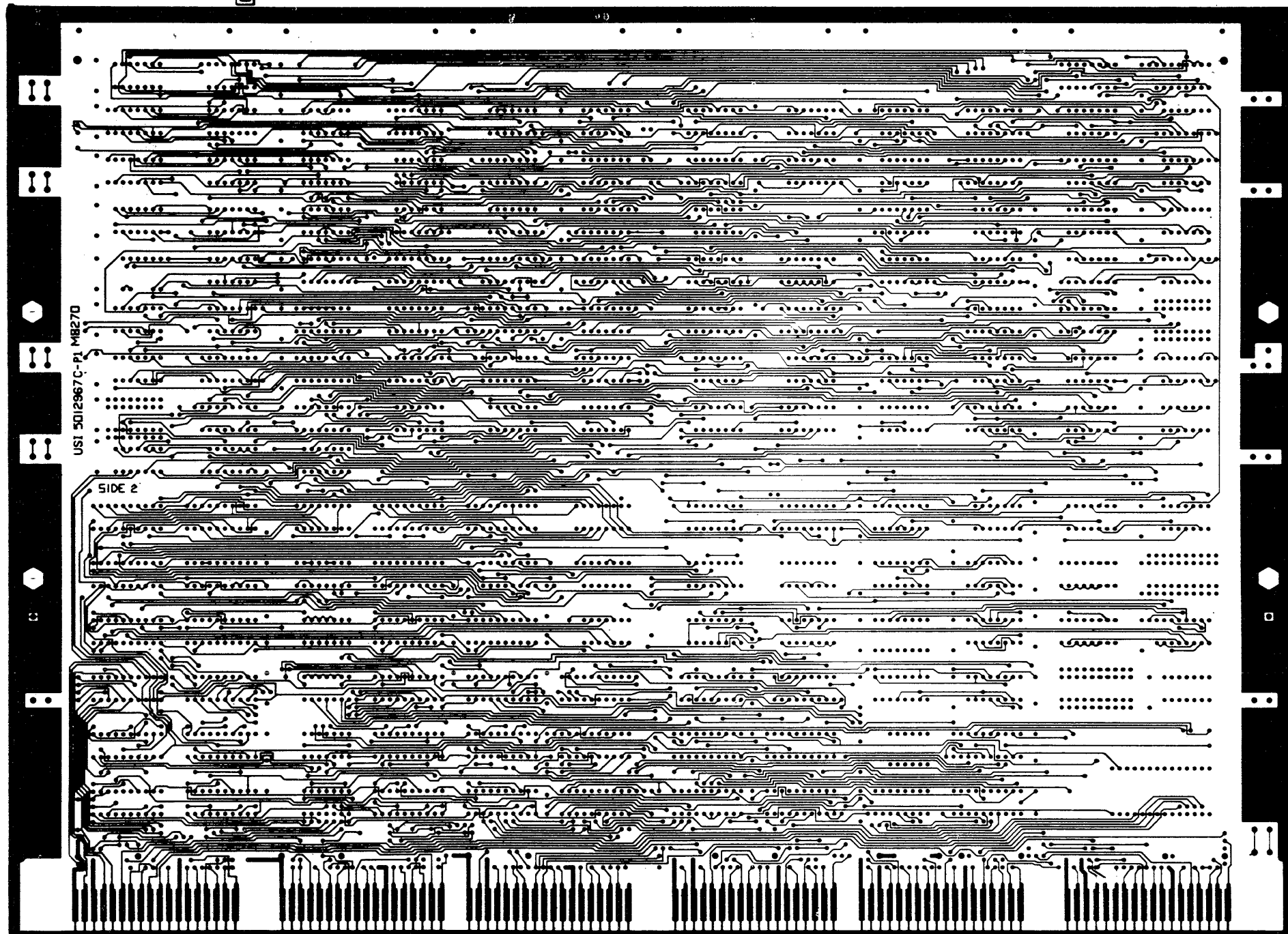


REV	DATE	BY

UNIBUS ADAPTER
SBI INTERFACE
1 JA M8270 - 0 - 0 D

UNIBUS ADAPTER SBI INTERFACE
REV. 2-78
DRAWN BY: J. J. ...
CHECKED BY: ...

LAYER 4



REV.	DATE	BY	CHKD.
1			
2			

UNIBUS ADAPTER
SBI INTERFACE
REV. 2-78
DRAWN BY: J. J. ...
CHECKED BY: ...

8 7 6 5 4 3 2 1

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	REFERENCE DESIGNATOR
1	D-MD-5012967-0-0	5012967-00	M8270 PC BRD	1	
2		1012084-01	8 MFD 25V G% 30D AL EL	7	C1-C7
3		1012784-00	.047 MFD 50V -20+80 CER	79	C8-C85,C86
4		1300365-00	1 K 1/4W 5% CC	3	R5,R6,R17
5		1301972-00	270 1/4W 5% CC	14	R1-R4,R7-R16
6		1300247-00	120 1/4W 5% CC	4	R18,R20,R22,R24
7		1300295-00	330 1/4W 5% CC	4	R19,R21,R23,R25
8		1913493-00	74S241 OCTAL BUFFER,TRI-STA	11	E3,E6,E17,E20,E46,E49,E59,E62, E65,E71,E119
9		1911641-00	SN 74S257 MUX,QUAD 2 TO 1	2	CONT E34,E61
10		1911573-00	74S280 PARITY GFN/CHKR,9BIT	4	E30,E31,E32,E33
11		1913670-00	74S373 LATCH 8BIT TRASP TR	3	E5,E19,E48
12		1913671-00	74S374 FF-D OCTAL TRISTATE	5	E4,E18,E47,E60,E72
13		1912813-00	LS27 NOR GATE-TRIPLE 3IN	2	E63,E79
14		1912815-00	LS30 NAND GATE-SINGLE 8IN	2	E40,E74
15		1912801-00	LS02 NOR-GATE-QUAD 2IN	2	E50,E76
16		1912824-00	LS74 FF-D DUAL,EDGE TRIGG	1	E55
17		1912828-00	LS85 COMPARATOR,4BIT MAGN	4	E22,E51,E99,E100
18		1912834-00	LS112 FF-JK DUAL,EDGE TRIG	3	E52,E53,E66
19		1912849-00	LS161 COUNTER,SYNCHR,4BIT	4	E92,E105,E132,E133
20		1912860-00	LS259 LATCH 8BIT	2	E35,E75
21		1912865-00	LS283 ADDER-4BIT BINARY FU	1	E145
22		1912697-00	LS174 FF-D HEX W/CLEAR	4	E98,E101,E102,E126
23		1912853-00	LS175 FF-D QUAD	2	E23,E64
24		1912731-00	DEC 8646A TRANSCEIVER,4BIT BUS	14	CONT E1,E2,E15,E16,E44,E45,E57,E58, E70,E83,E94,E96,E97,E118
25		1913730-00	DC 101 PRIORITY ARBITRATOR	1	E143
26		1911398-00	10101 OR/NOR GATE,4-2IN	2	E109,E110
27		1911415-00	10125 FCL TO TTL TRNSLTR	3	E120,E121,E122
28		1913220-00	10216 RECEIVER,TRIPLE LINE	1	E108

REVISION HISTORY			BASIC PART NO: M8270		DRN: K.FRIEDGEN		DATE: 07-SEP-79		DIGITAL			
ENG	ECO NUMBER	REV	SECTION A OF A	CHK'D:	D.HEALEY	DATE:	07-SEP-79	TITLE	PARTS LIST			
---	INITIAL	D	SECTION VARIATION INDEX	DES.ENG:	J.GRADY <td>DATE:</td> <td>07-SEP-79 <td>USI I</td> <td colspan="4"></td> </td>	DATE:	07-SEP-79 <td>USI I</td> <td colspan="4"></td>	USI I				
			[A] 00	RESP.ENG.:	J.GRADY <td>DATE:</td> <td>07-SEP-79 <td>DOCUMENT NUMBER</td> <td colspan="4"></td> </td>	DATE:	07-SEP-79 <td>DOCUMENT NUMBER</td> <td colspan="4"></td>	DOCUMENT NUMBER				
			[B]	MFG.ENG.:	M.TEPILLA <td>DATE:</td> <td>07-SEP-79 <td>SIZE:CODE: NUMBER</td> <td>REV</td> <td colspan="3"></td> </td>	DATE:	07-SEP-79 <td>SIZE:CODE: NUMBER</td> <td>REV</td> <td colspan="3"></td>	SIZE:CODE: NUMBER	REV			
			[C]	ASSEMBLY NUMBER:		TOP DOCUMENT NUMBER:		K PL	M8270-0-DBP	D		
			[D]	ID-UA-M8270-0-0		B-DD-M8270-0-0		FILE NAME:	EDIT #			
			[E]					M8270.PLS	5			
			[F]	"THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1979, DIGITAL EQUIPMENT CORPORATION"								
			[G]									
			[H]									
			[I]									
			[J]									
			[K]									
			[L]									
			[M]									
			[N]									

TW

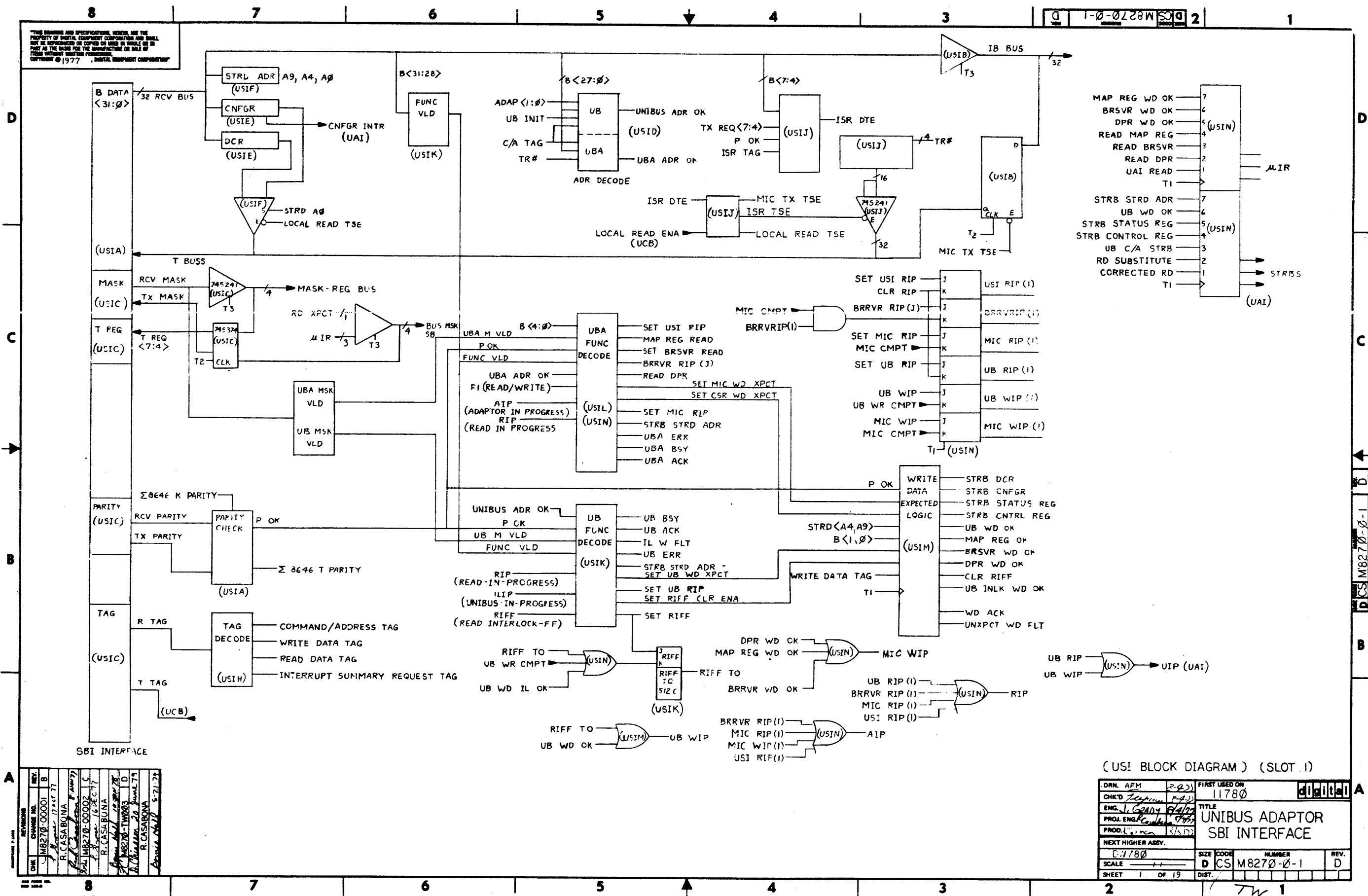
LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
29	29	1912810-00	LS20 NAND GATE-DUAL 4IN	1	E77
30	30	1910532-00	74S00 NAND GATE-QUAD 2IN8	8	E7, E28, E43, E89, E93, E107, E116, E134
31	31	1912388-00	74S02 NOR GATE-QUAD 2IN, PO	5	CONT E41, E80, E82, E113, E154
32	32	1910534-00	74S04 INVERTER GATE-HEX 1I	6	E25, E123, E136, E140, E144, E128
33	33	1912389-00	74S08 AND GATE-QUAD 2IN, PO	5	E24, E36, E42, E125, E135
34	34	1910536-00	74S10 NAND GATE-TRIPLE 3IN	7	E26, E29, E54, E114, E148, E152, E153
35	35	1910537-00	74S11 AND GATE-TRIPLE 3INP	4	E27, E69, E112, E127
36	36	1910539-00	74S20 NAND GATE-DUAL 4INPU	8	CONT E11, E14, E67, E138, E139, E141, E149, E151
37	37	1910542-00	74S64 A-O-I GATE 4-2-3-2	1	E73
38	38	1910544-00	74S74 FF-D DUAL, EDGE TRIGG	4	E10, E103, E106, E147
39	39	1910547-00	74S112 FF-JK DUAL, EDGE TRIG	5	E124, E129, E130, E142, E155
40	40	1911983-00	74S133 NAND GATE-POSITIVE 1	5	E37, E38, E39, E94, E95
41	41	1912125-00	74S135 XOR/NOR GATE-QUAD 2I	1	E104
42	42	1913340-00	74S32 OR GATE-QUAD 2IN	4	E9, E78, E117, E81
43	43	1911675-00	74S138 DECODER/DEMUX 3-8 LIN	4	E56, E111, E12, E13
44	44	1911676-00	74S139 DECODER-DUAL TWO-INP	1	E68
45	45	1910546-00	74S140 NAND GATE-DUAL 4INPU	1	E21
46	46	1910956-00	74S151 MUX 1 OF 8	1	E91
47	47	1910548-00	74S157 MUX 1 OF 2 (QUAD)	2	E85, E86
48	48	1910550-00	74S174 FF-D HEX	3	E87, E88, E137
49	49	1910957-00	74S175 FF-D QUAD COMMON CLO	1	E115
50	50	1912746-00	DEC 74S37 NAND GATE-QUAD 2IN	1	E90
51	51	9000024-01	EYELET, ROLLED FLANGE, .121 OD X	12	
52	52	1210711-02	HANDLE, MODULE, HEX	1	

0 NOTE: I.C. SPARE LOCATIONS ARE: F8, E131, E146, E150

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							USI I		K	PL	M8270-0-DBP	D

TW

THIS DRAWING AND SPECIFICATIONS HEREBY ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1977 . DIGITAL EQUIPMENT CORPORATION



(USI BLOCK DIAGRAM) (SLOT 1)

DRN. AFM	2-23	FIRST USED ON	11780
CHK'D	2-23	TITLE	UNIBUS ADAPTOR SBI INTERFACE
ENGR.	J. Gandy	PROL. ENGR.	11/7/77
PROD. ENGR.	11/7/77	SIZE	C:1780
NEXT HIGHER ASSY.		SCALE	1:1
SHEET	1 OF 19	DIST.	

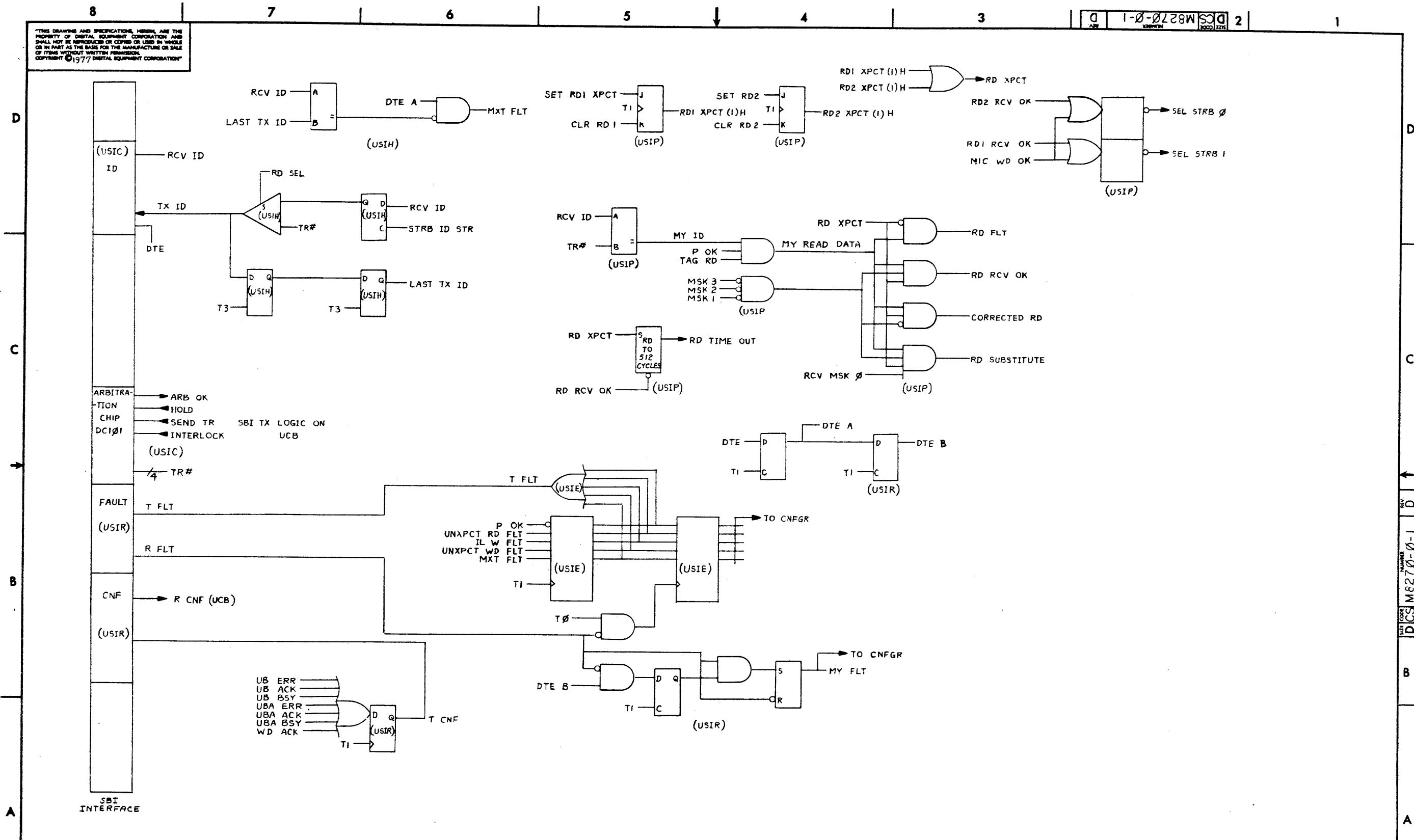
REVISIONS

REV.	NO.	DATE	BY	CHKD.
1	1	11/7/77	R. CASA BONA	
2	2	12/2/77	R. CASA BONA	
3	3	12/2/77	R. CASA BONA	
4	4	12/2/77	R. CASA BONA	
5	5	12/2/77	R. CASA BONA	
6	6	12/2/77	R. CASA BONA	
7	7	12/2/77	R. CASA BONA	
8	8	12/2/77	R. CASA BONA	

CS M8270-0-1

TW 1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

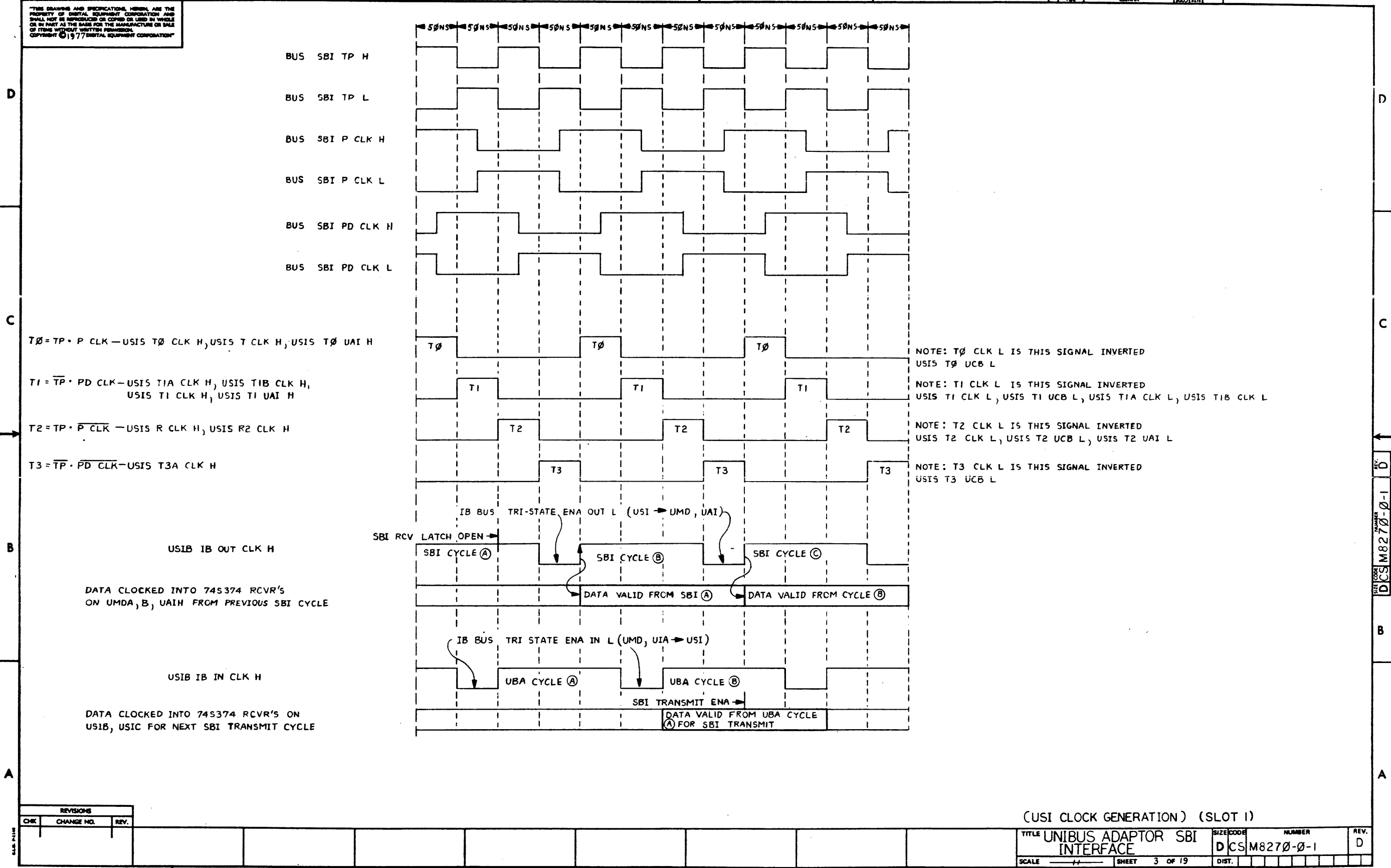


REVISIONS		
CHK	CHANGE NO.	REV.

(USI BLOCK DIAGRAM) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE	SIZE CODE	D CS	NUMBER	M8270-0-1	REV.	D
SCALE	1/4"	SHEET	2	OF 19	DIST.		

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



NOTE: T0 CLK L IS THIS SIGNAL INVERTED
USIS T0 UCB L

NOTE: T1 CLK L IS THIS SIGNAL INVERTED
USIS T1 CLK L, USIS T1 UCB L, USIS T1A CLK L, USIS T1B CLK L

NOTE: T2 CLK L IS THIS SIGNAL INVERTED
USIS T2 CLK L, USIS T2 UCB L, USIS T2 UAI L

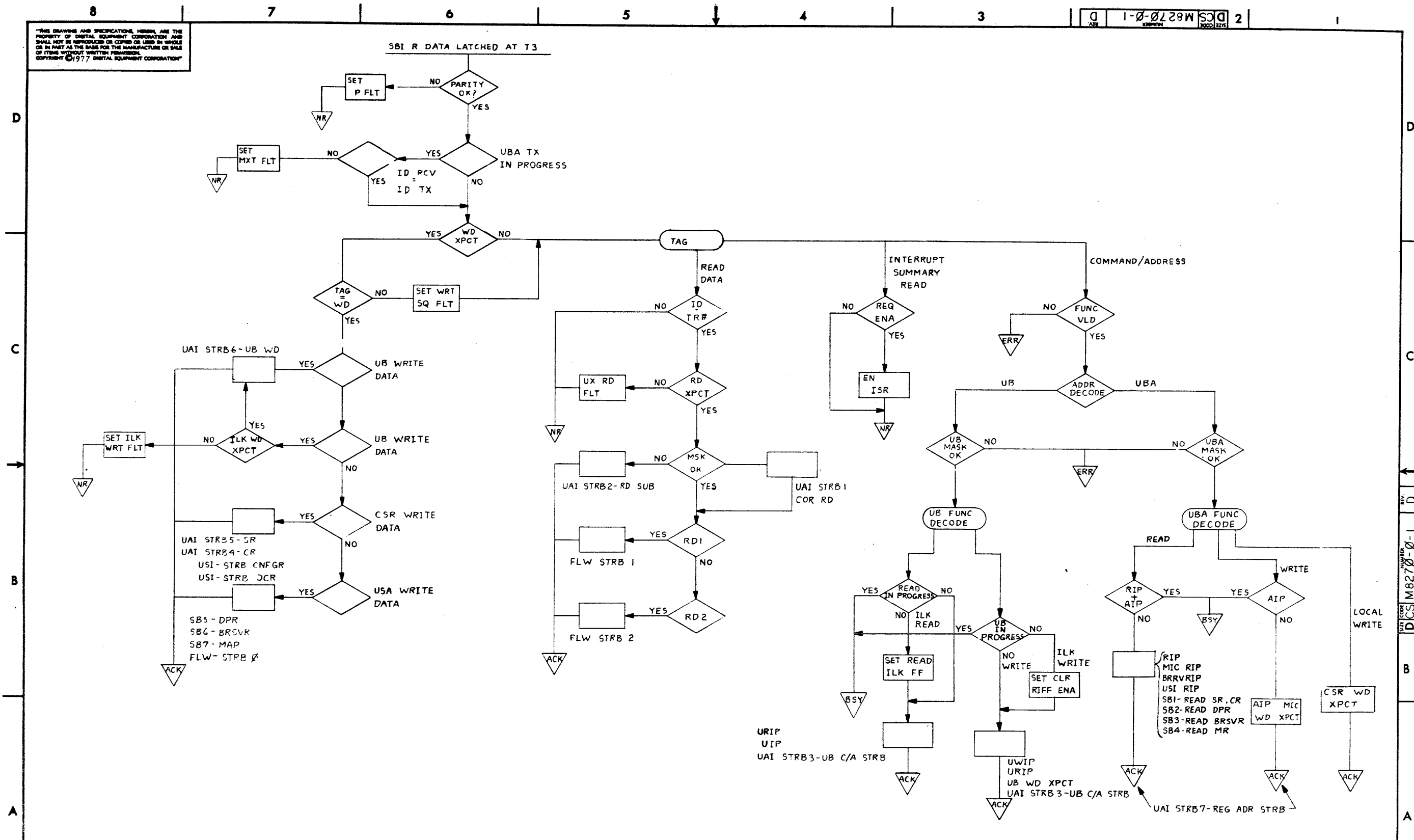
NOTE: T3 CLK L IS THIS SIGNAL INVERTED
USIS T3 UCB L

REVISIONS		
CHK	CHANGE NO.	REV.

(USI CLOCK GENERATION) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE	SIZE CODE	D	NUMBER	M8270-0-1	REV.	D
SCALE	1:1	SHEET	3 OF 19	DIST.			

"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"

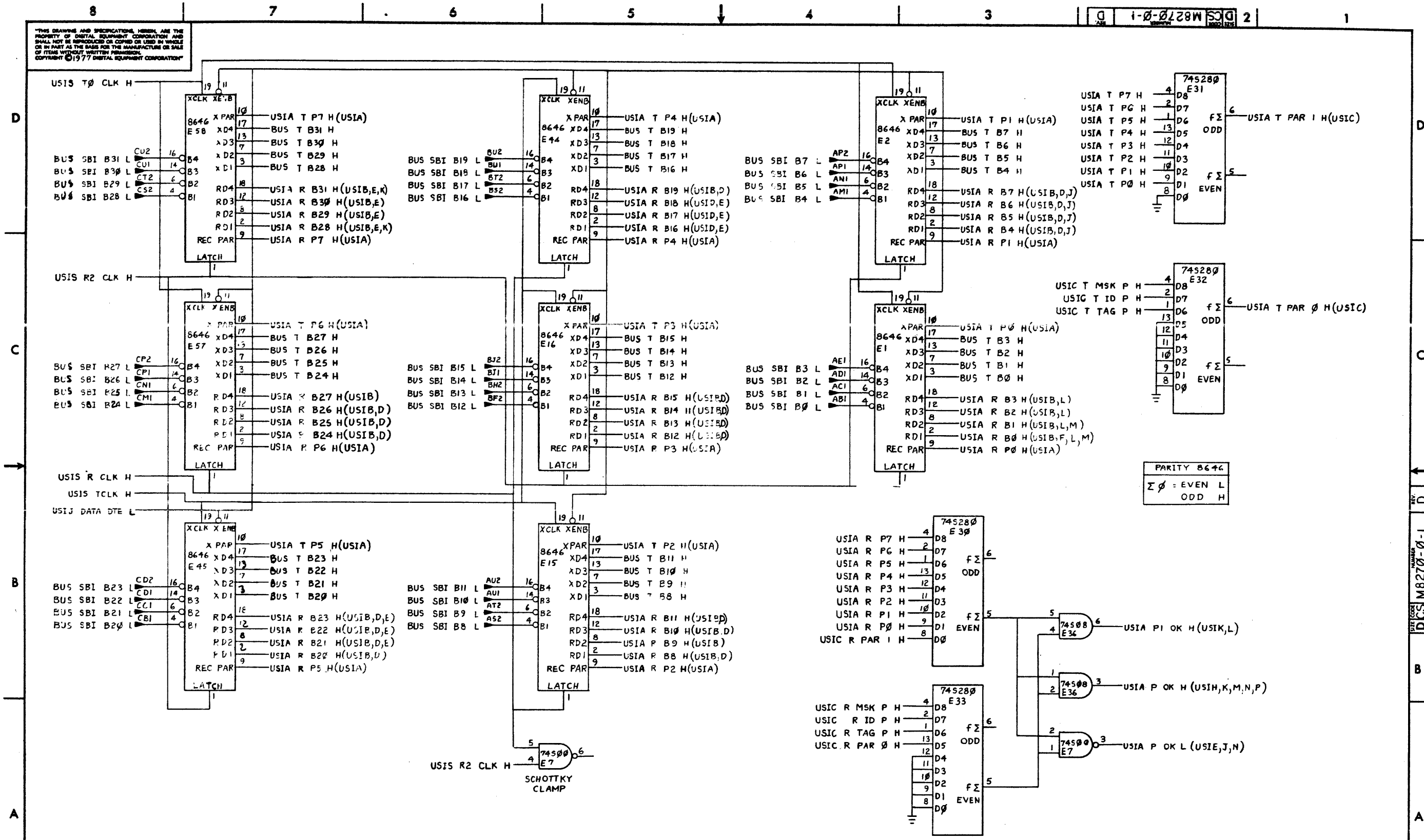


REVISIONS		
CHK	CHANGE NO.	REV.

(USI SBI RCV FLOWS) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE	SIZE CODE	D CS	NUMBER	M8270-0-1	REV.	D
SCALE		SHEET	4 OF 19	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

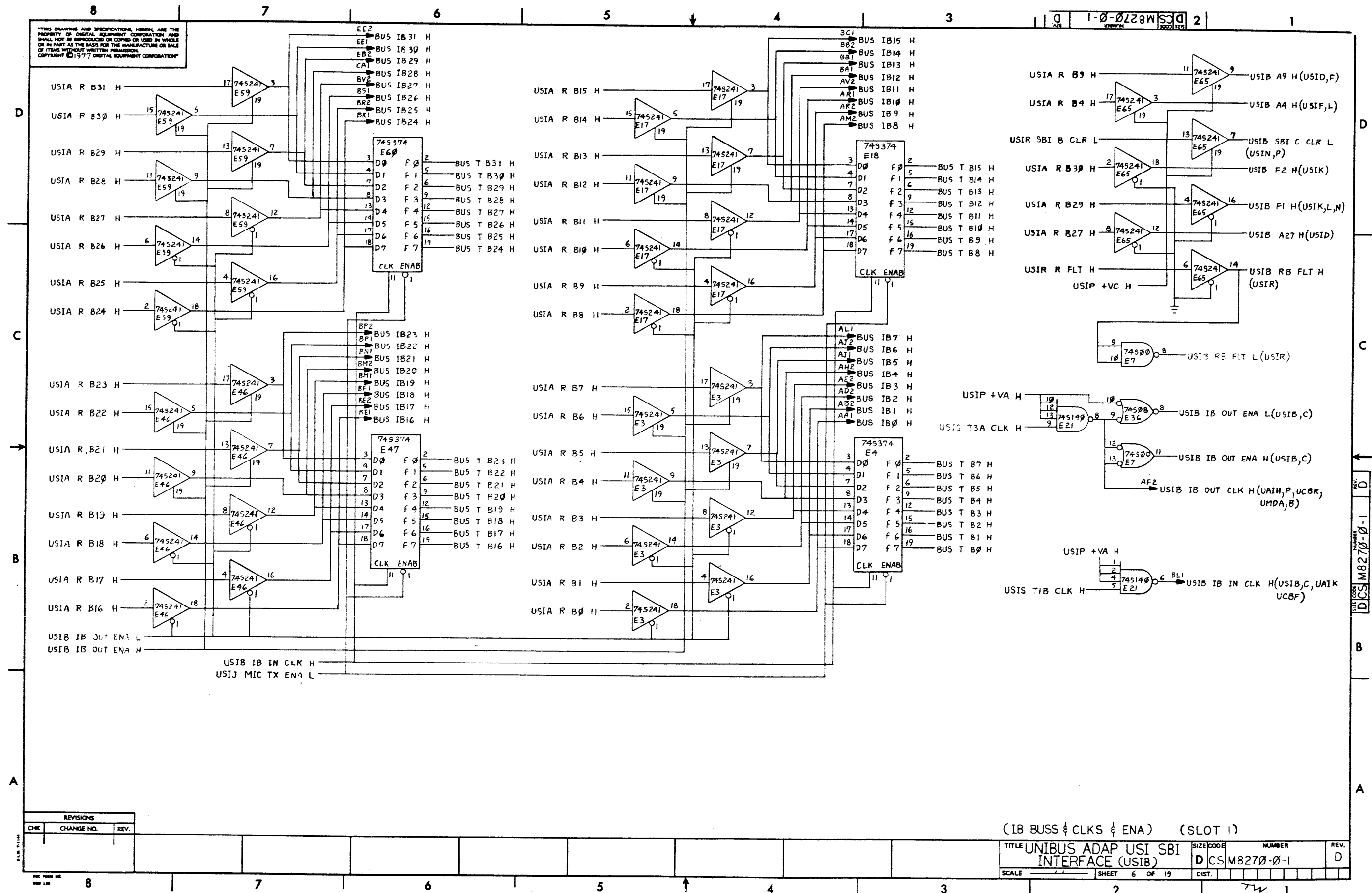


REVISIONS		
CHK	CHANGE NO.	REV.

(DATA TRANSCEIVERS & PARITY) (SLOT 1)		TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIA)	SIZE CODE	D CS	NUMBER	M8270-0-1	REV.	D
SCALE	1	SHEET	5 OF 19	DIST.					

REV. D DCS M8270-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



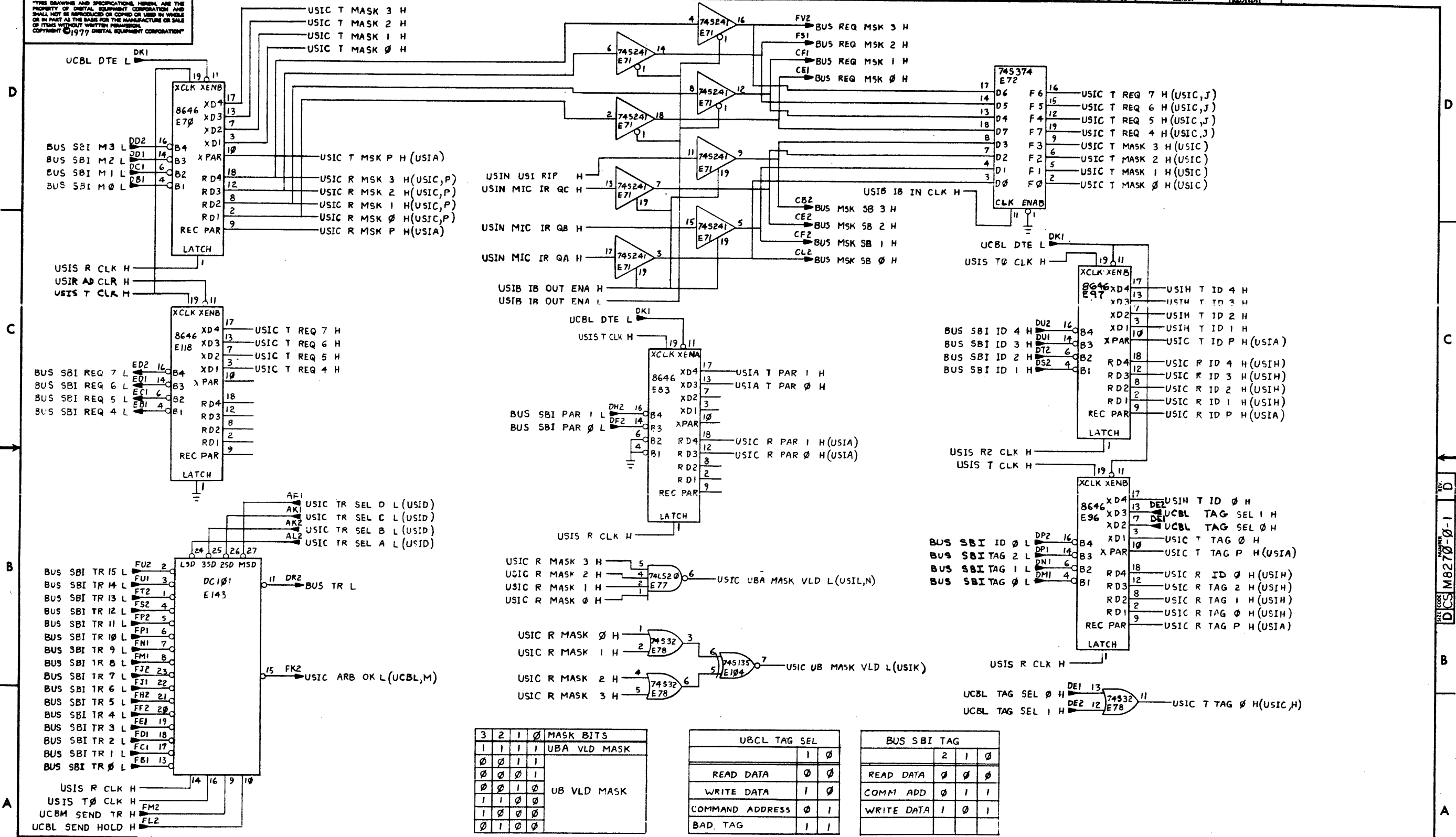
REVISIONS		
CHK	CHANGE NO.	REV.

(IB BUSS & CLKS & ENA) (SLOT 1)

TITLE	UNIBUS ADAP USI SBI INTERFACE (USIB)	SIZE CODE	NUMBER	REV.
SCALE		SHEET	6 OF 19	D
DIST.				

DCS M8270-0-1
 SHEET 6 OF 19

"THE DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"



3	2	1	0	MASK BITS
1	1	1	1	UBA VLD MASK
0	0	1	1	
0	0	0	1	
0	0	1	0	UB VLD MASK
1	1	0	0	
1	0	0	0	
0	1	0	0	

UBCL TAG SEL	
READ DATA	0 0
WRITE DATA	1 0
COMMAND ADDRESS	0 1
BAD TAG	1 1

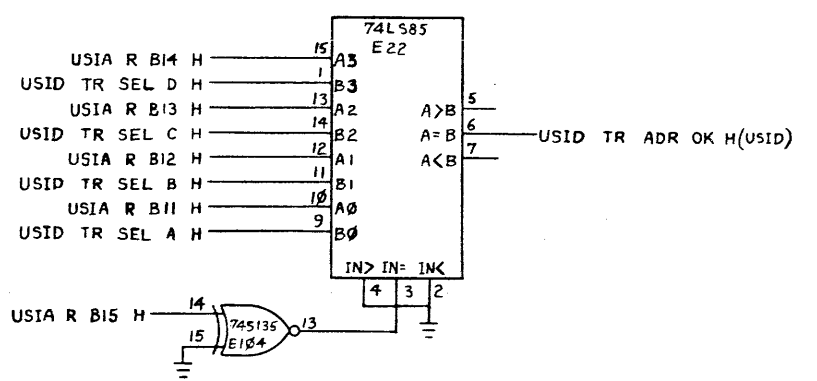
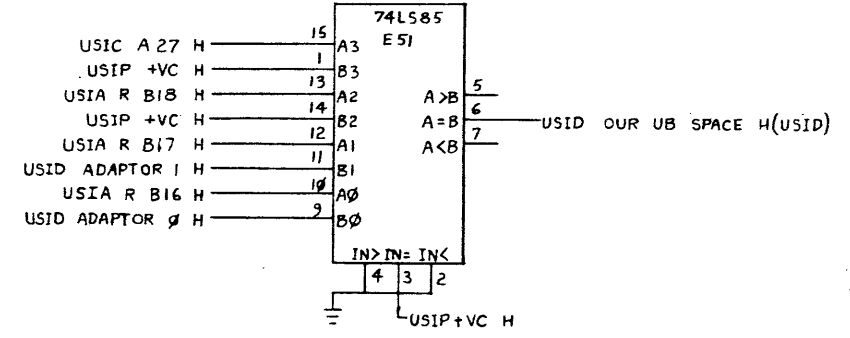
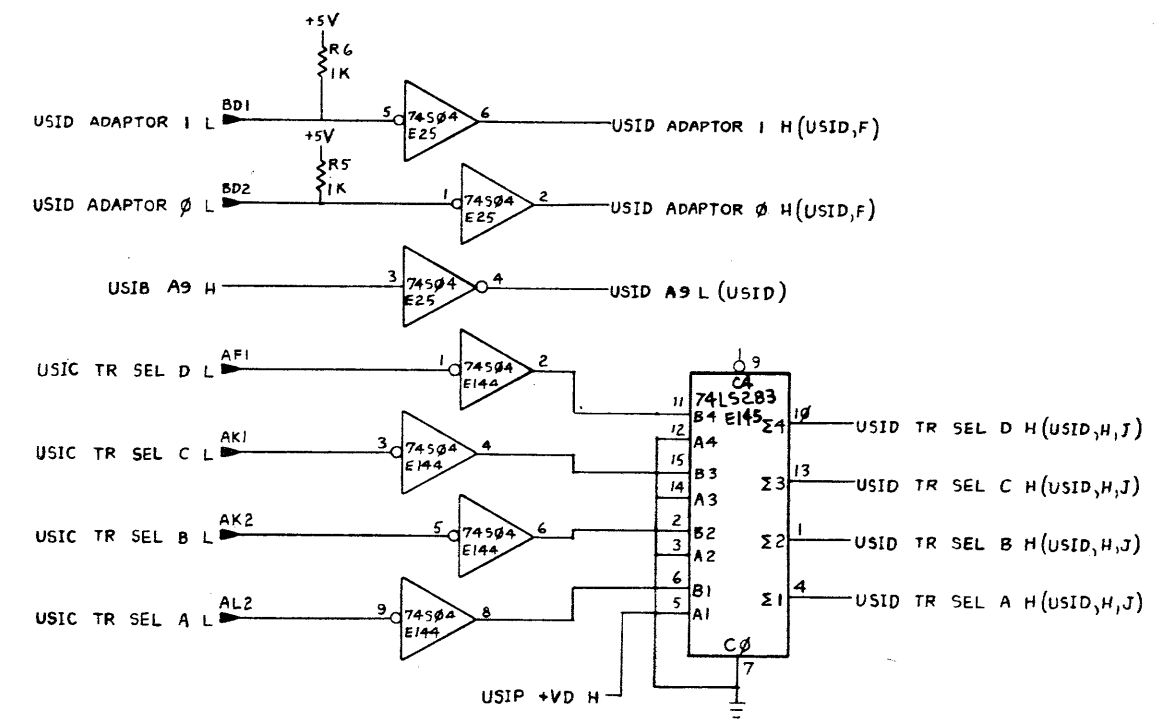
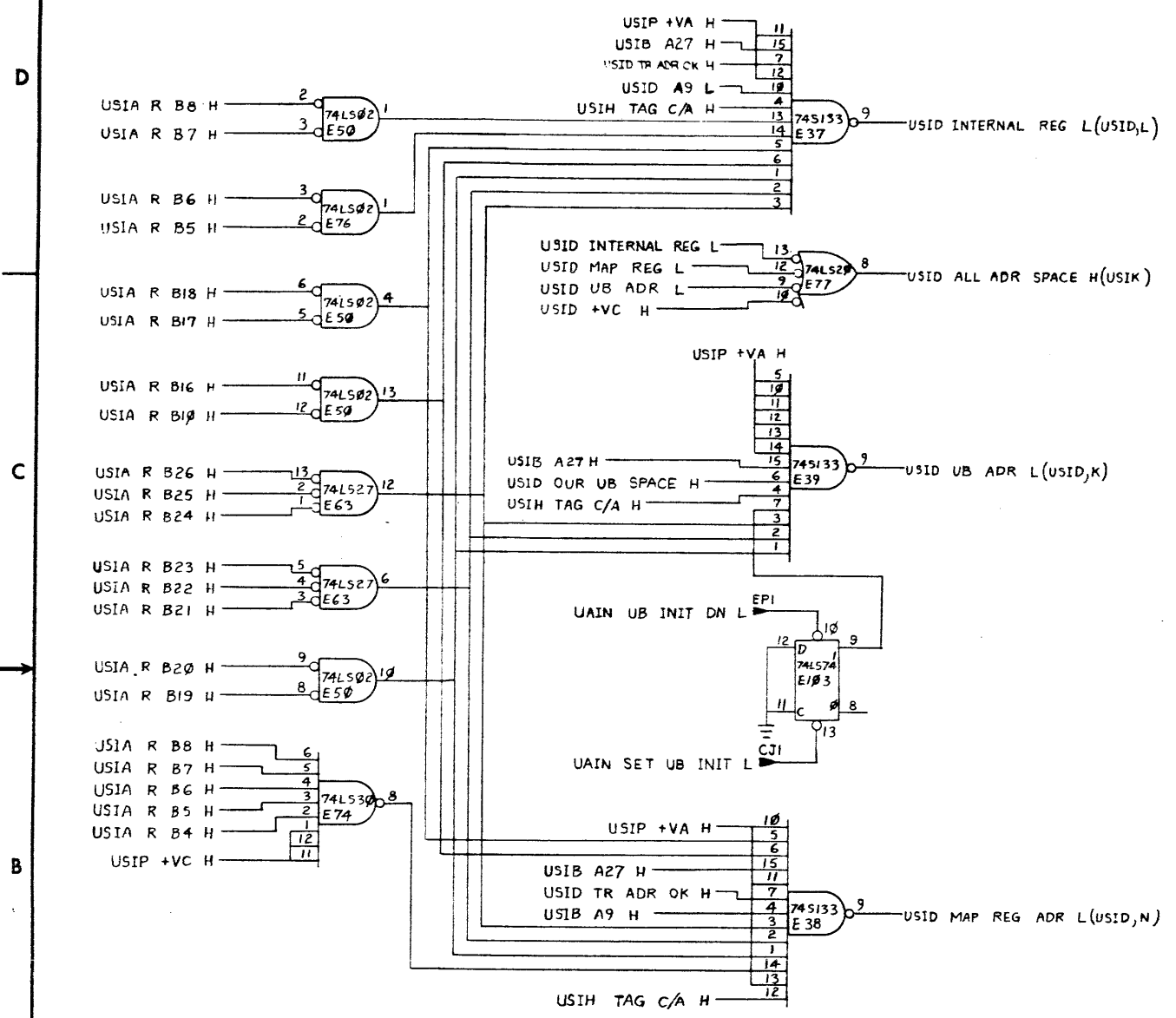
BUS SBI TAG		
READ DATA	0	0
COMM ADD	0	1
WRITE DATA	1	0

REVISIONS		
CHK	CHANGE NO.	REV.

(SBI; TAG, MASK, PARITY, ID, ARBITRATION) (SLOT 1)

TITLE	SIZE CODE	NUMBER	REV.
UNIBUS ADAPTOR SBI INTERFACE (USIC)	D	CSM8270-0-1	D

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

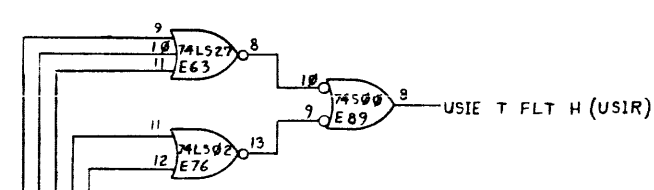
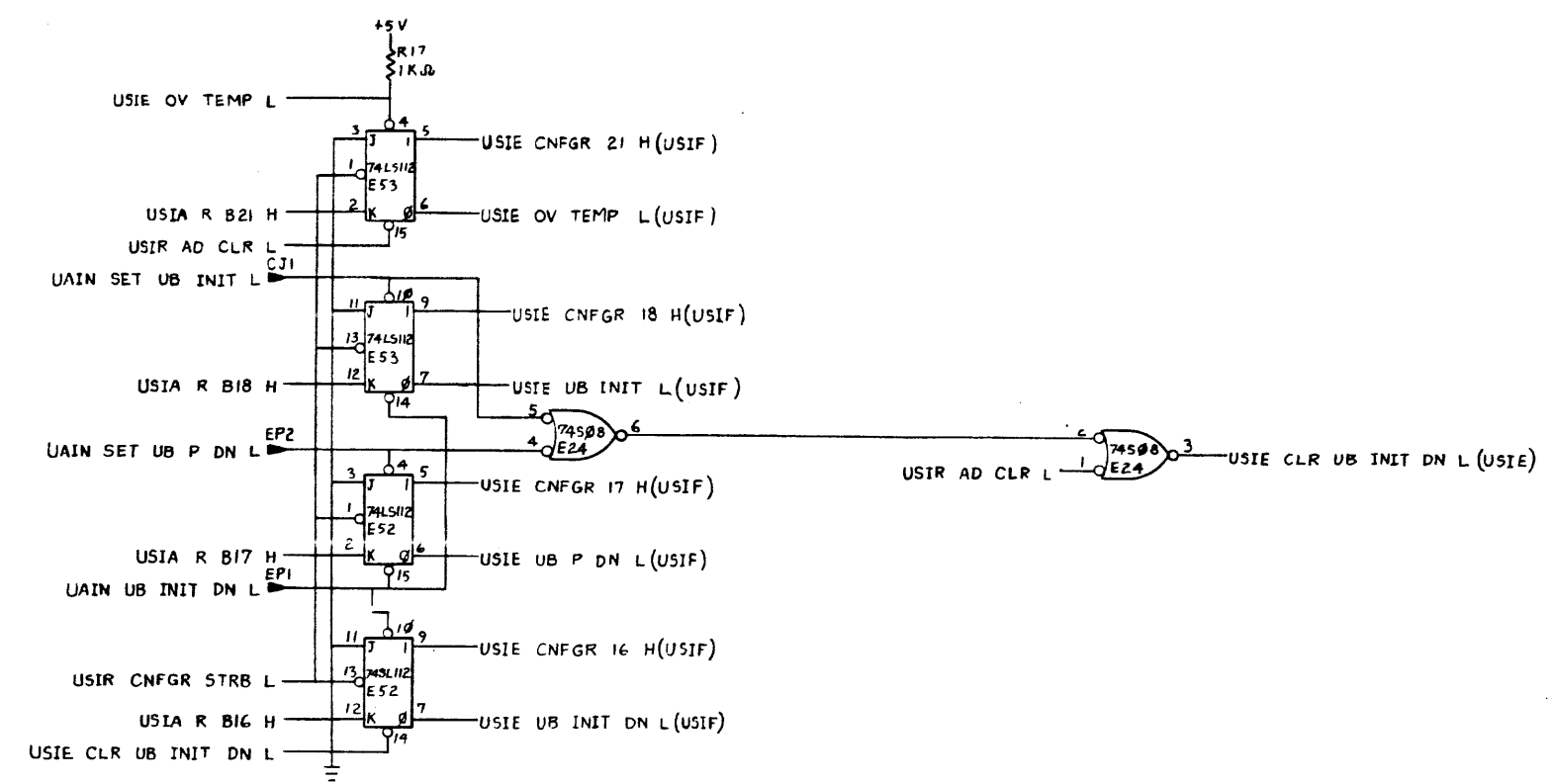
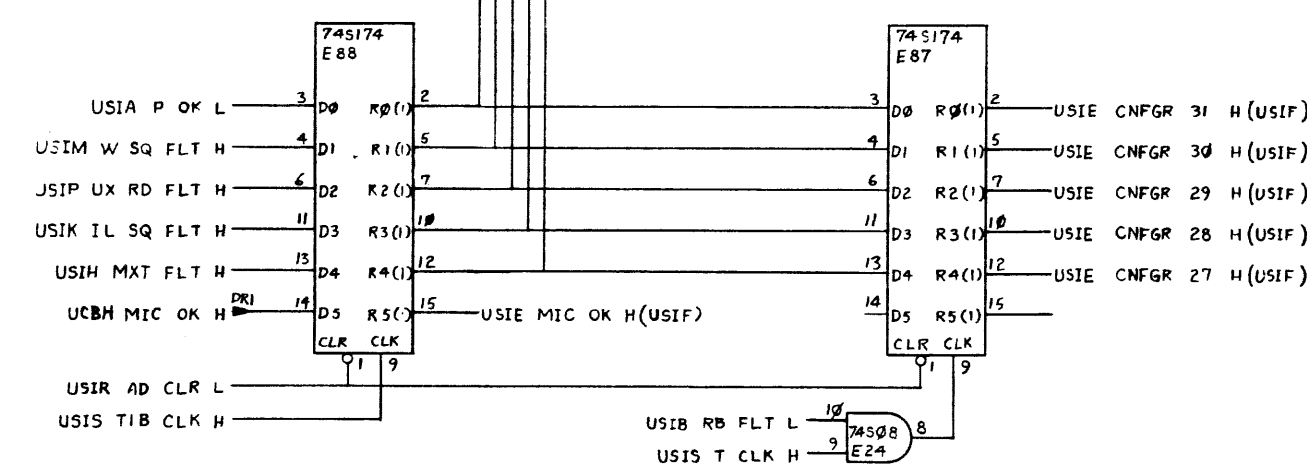
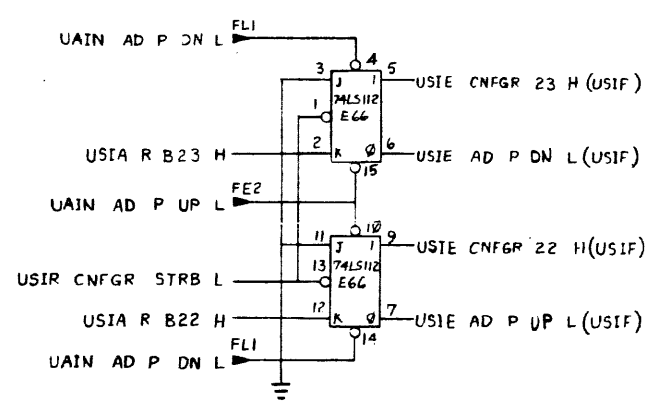
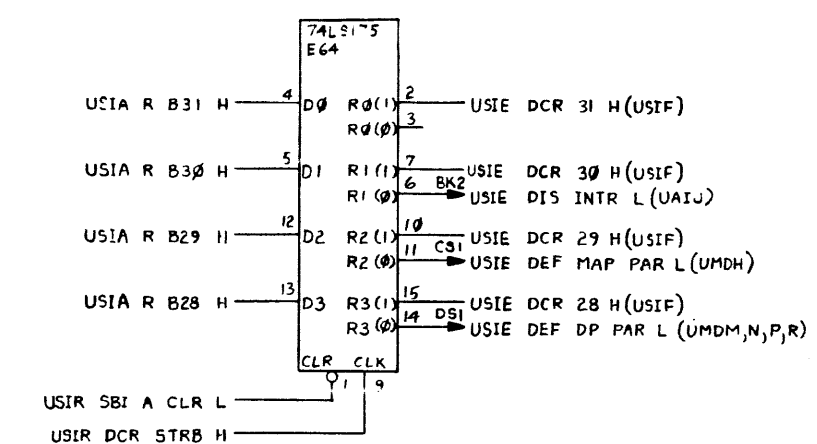
(UBA ADDRESS DECODE, UNIBUS ADDRESS DECODE) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USID)	SIZE/CODE	D CS M8270-0-1	NUMBER	2	REV.	D
SCALE	1:1	SHEET	8 OF 19	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

D
C
B
A

D
C
B
A

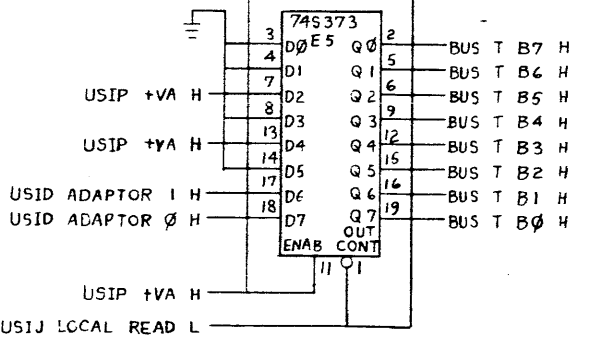
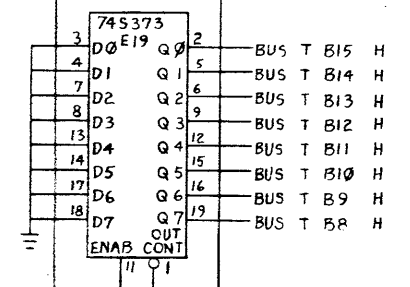
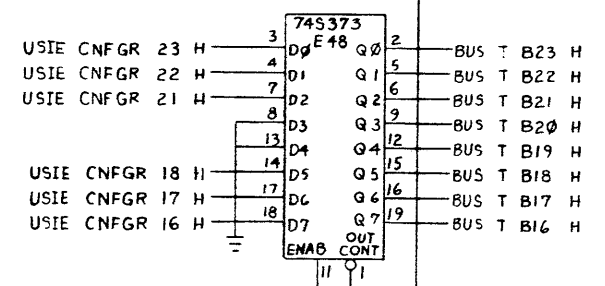
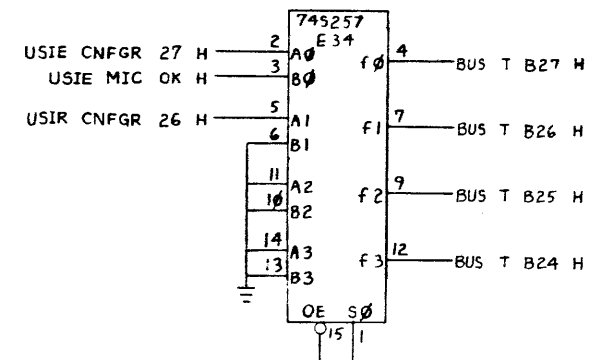
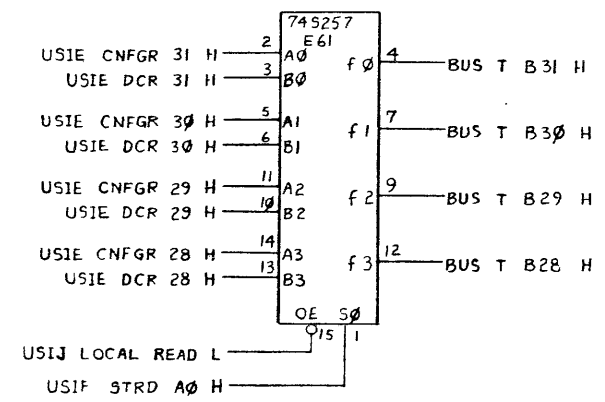
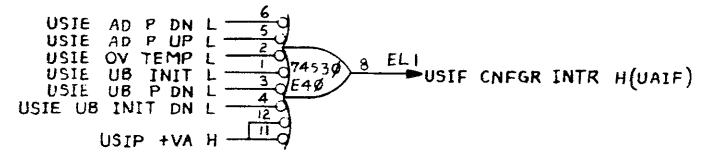
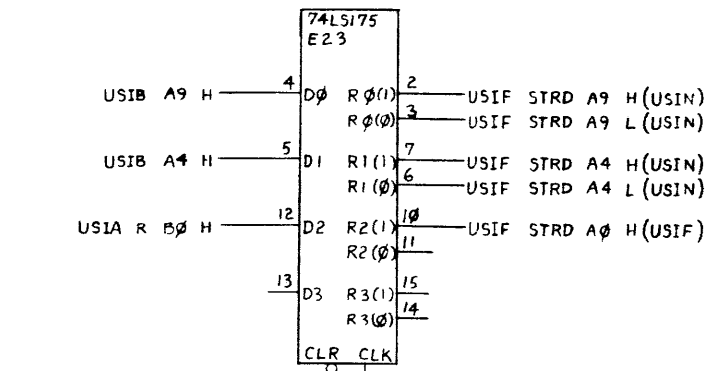


REVISIONS		
CHK	CHANGE NO.	REV.

(CONFIGURATION & DIAGNOSTIC CONTROL REG) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIE)	SIZE CODE	DCS	NUMBER	M8270-0-1	REV.	D
SCALE	1:1	SHEET	9 OF 19	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

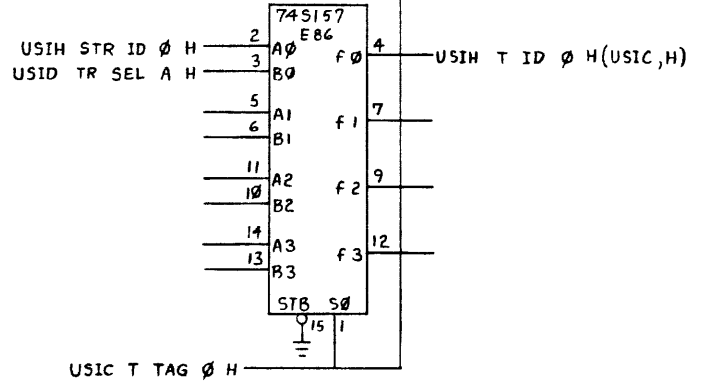
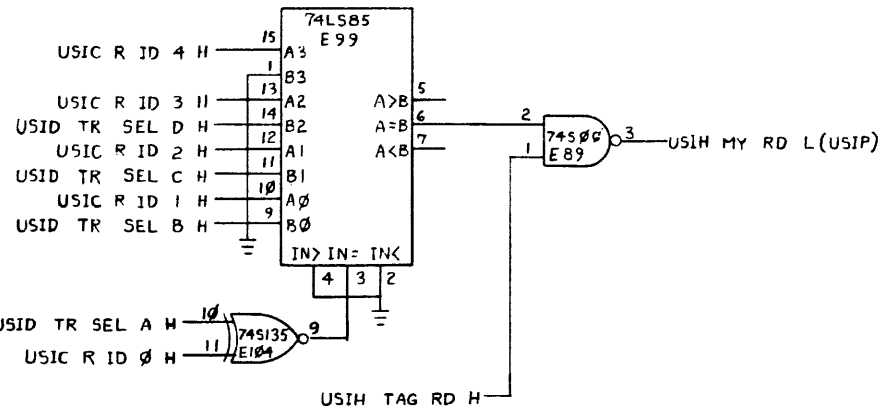
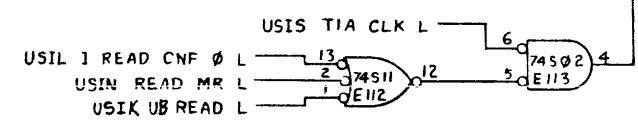
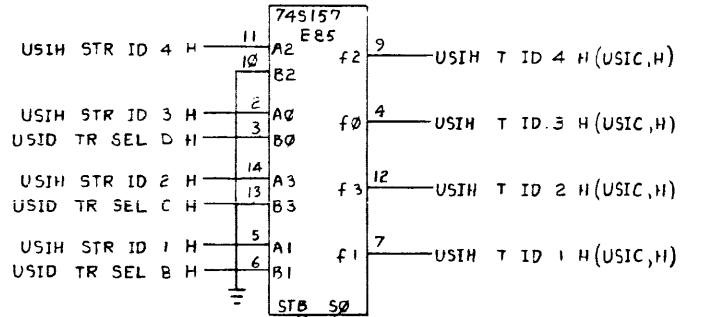
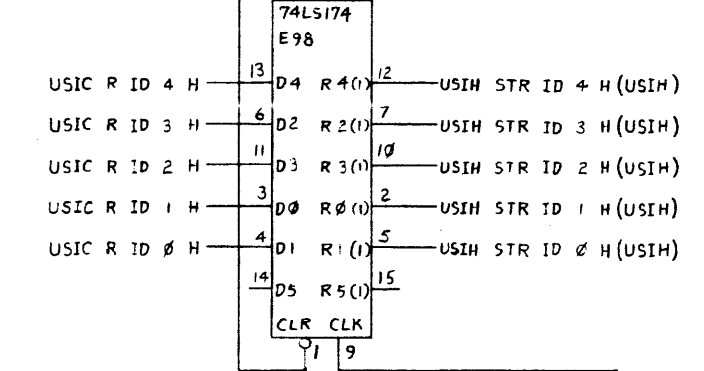
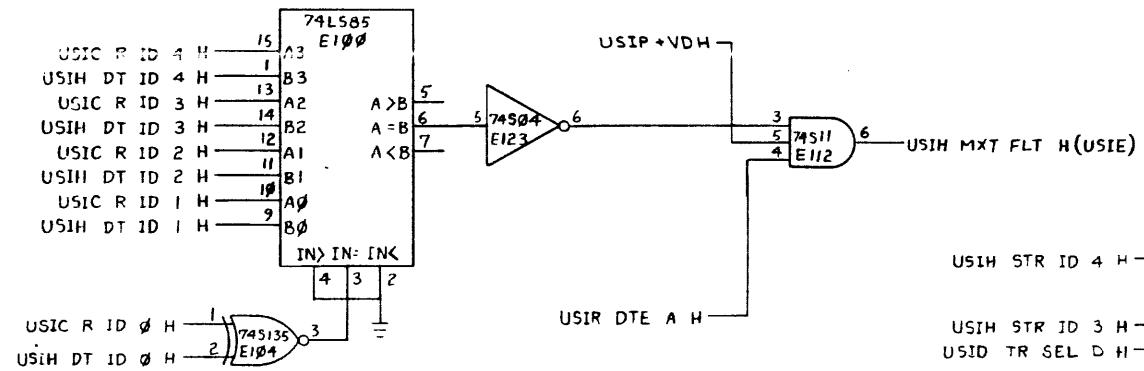
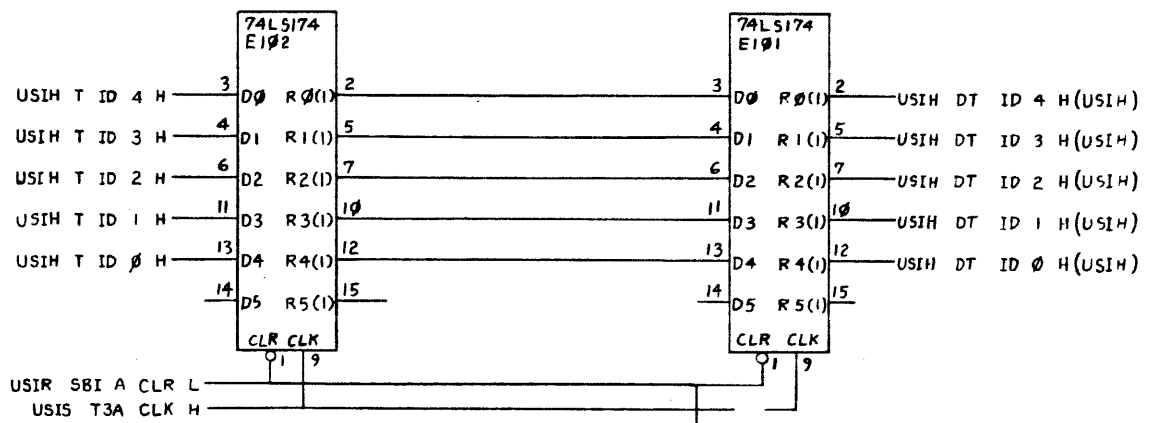
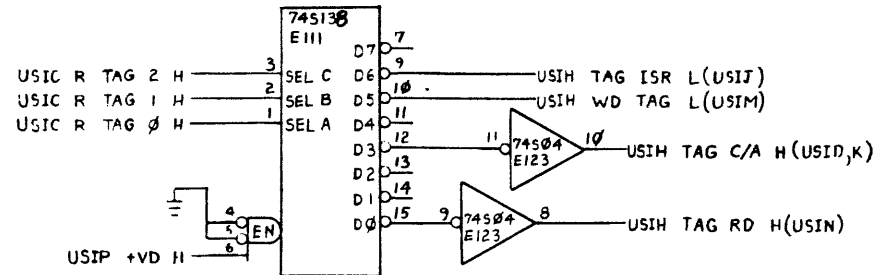
(TRANS. LOCAL REG., CNFGR INTR) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIF)	SIZE CODE	D	NUMBER	M8270-0-1	REV.	D
SCALE	1:1	SHEET	10	OF	19	DIST.	

REV. D
NUMBER
DCS M8270-0-1

"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"

R TAG	2	1	0
ISR	1	1	0
WD	1	0	1
C/A	0	1	1
RD	0	0	0



74LS135
PINS 4 & 12 TIED TO
USIP +VB H

REVISIONS		
CHK	CHANGE NO.	REV.

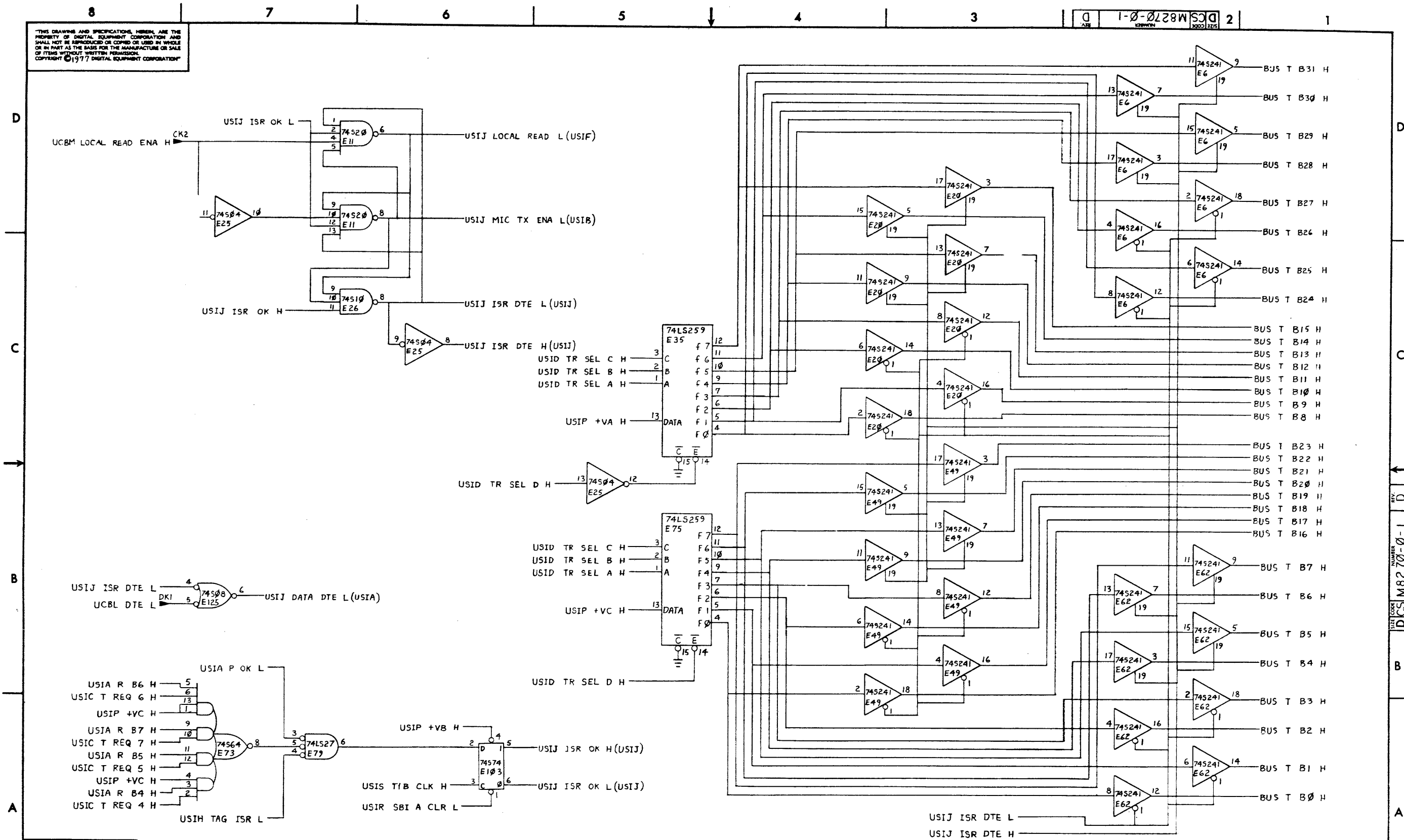
(ID COMPARE & ID STORE) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIH)	SIZE CODE	D CS M8270-0-1	NUMBER		REV.	D
SCALE	1:1	SHEET	11 OF 19	DIST.			

REV. D
NUMBER
D CS M8270-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

DCS M8270-0-1



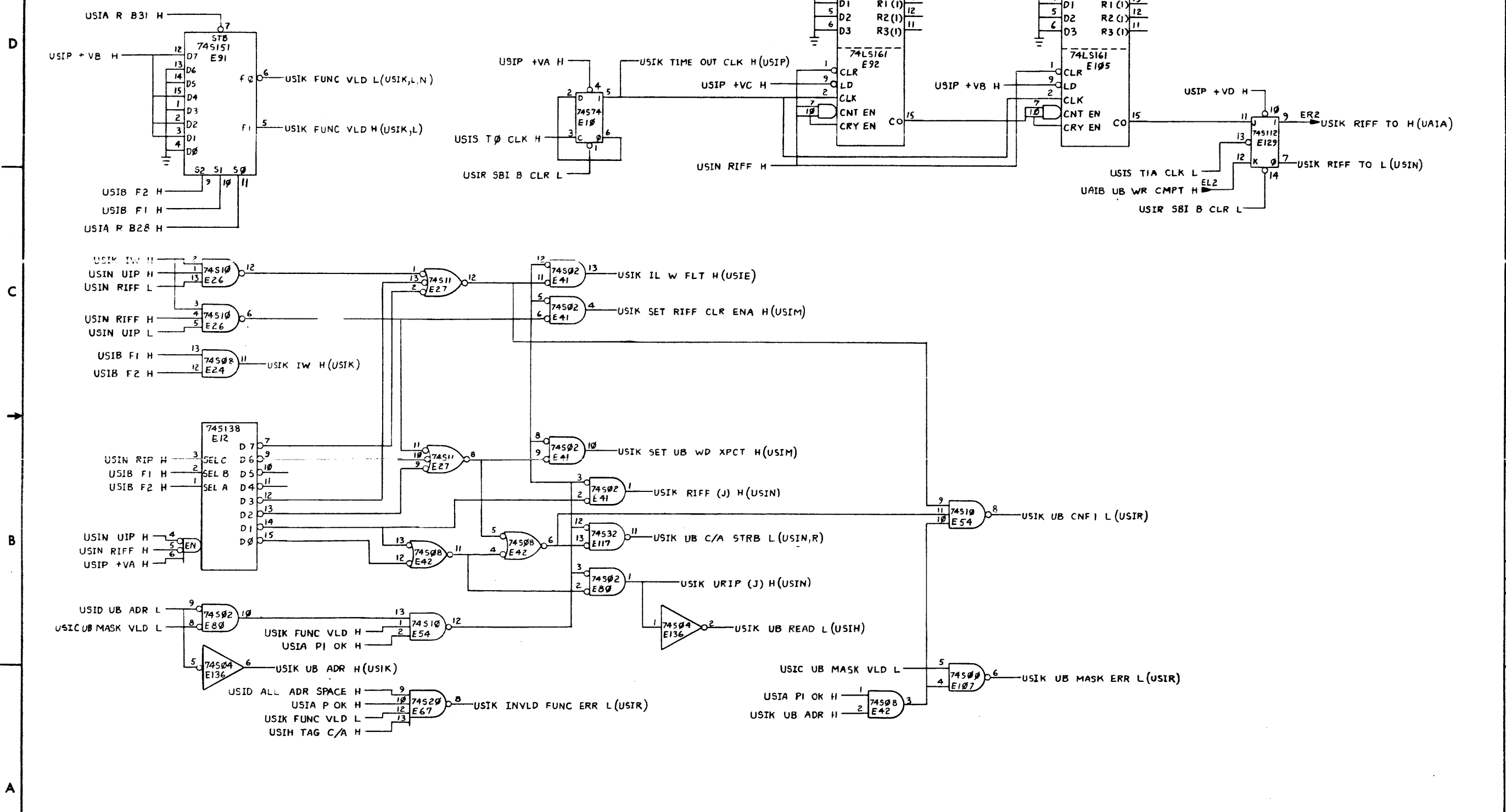
(INTERRUPT SUMMARY RESPONSE) (SLOT 1)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIJ)	SIZE CODE	D	NUMBER	DCS M8270-0-1	REV.	D
SCALE	1:1	SHEET	12	OF 19	DIST.		

DCS M8270-0-1

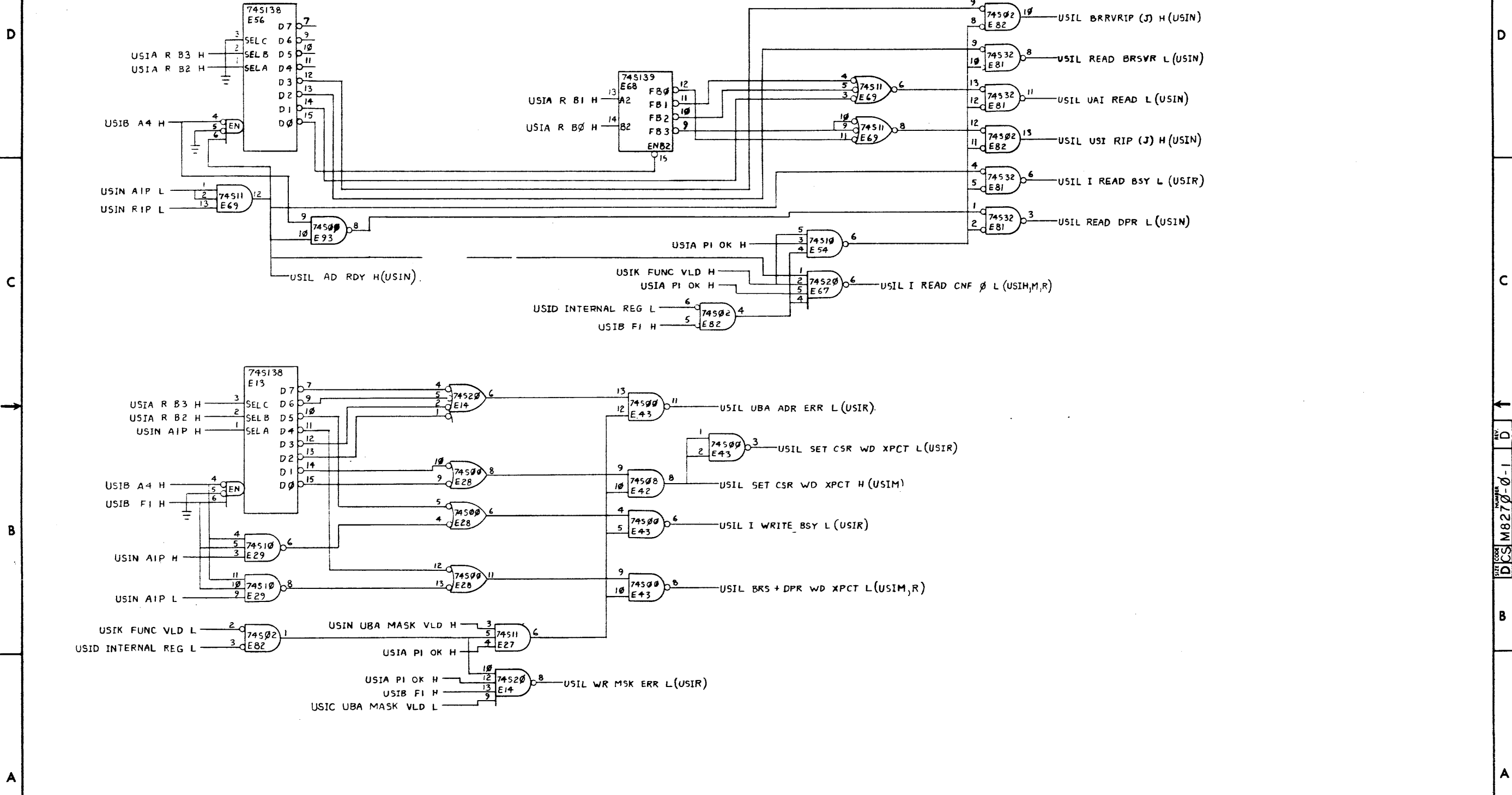
"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"



REVISIONS													TITLE UNIBUS ADAPTOR SBI INTERFACE (USIK)			SIZE CODE	NUMBER	REV.
CHK	CHANGE NO.	REV.											DCS	M8270-01	D			
													SCALE	SHEET 13 OF 19	DIST.			

(SLOT 1) (UNIBUS FUNCTION DECODE, READ INTERLOCK TIMEOUT)

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

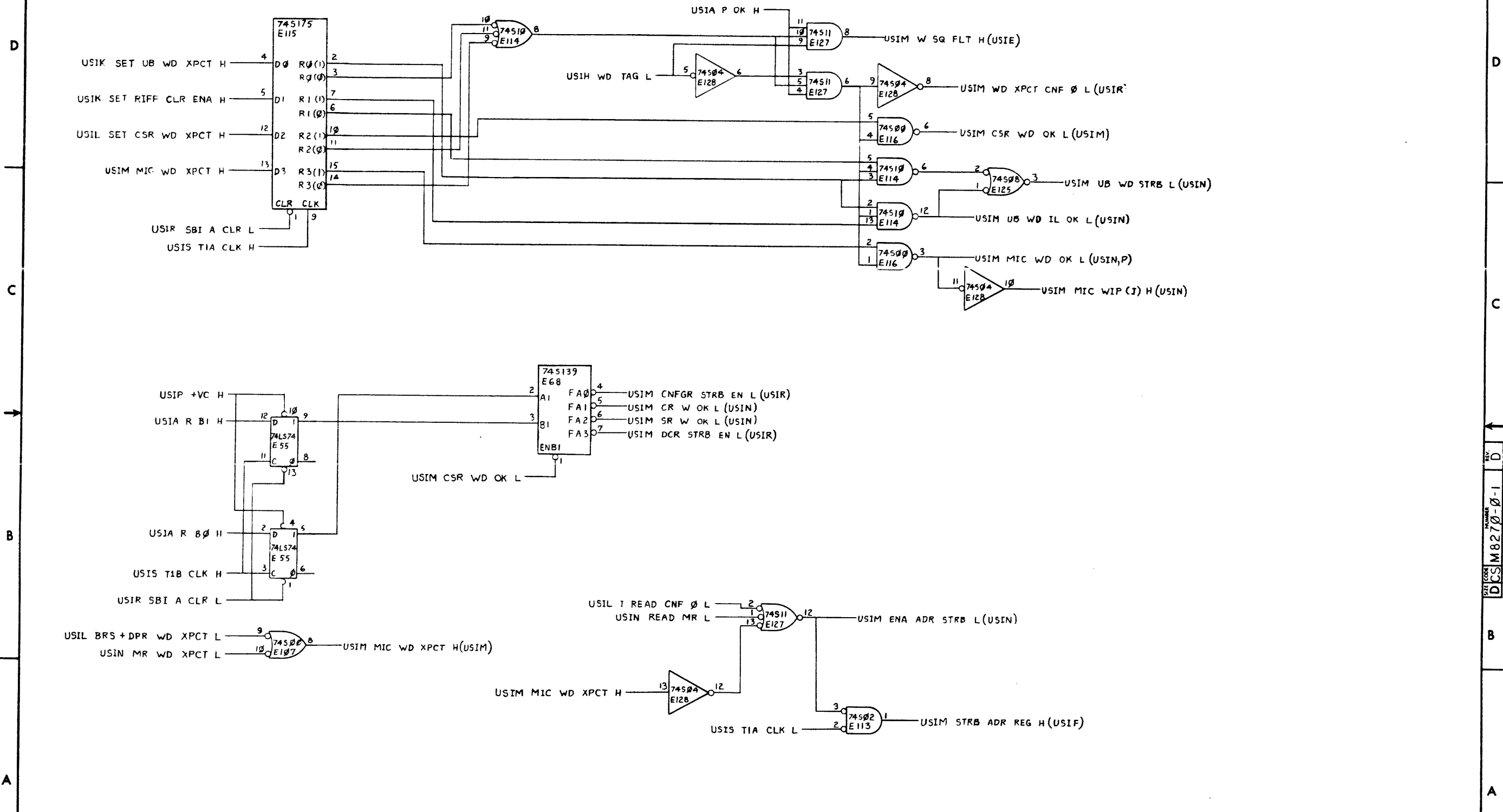


REVISIONS		
CHK	CHANGE NO.	REV.

(UBA FUNCTION DECODE) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIL)	SIZE CODE	DCS	NUMBER	M8270-0-1	REV.	D
SCALE	1/1	SHEET	14	OF 19	DIST.		

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



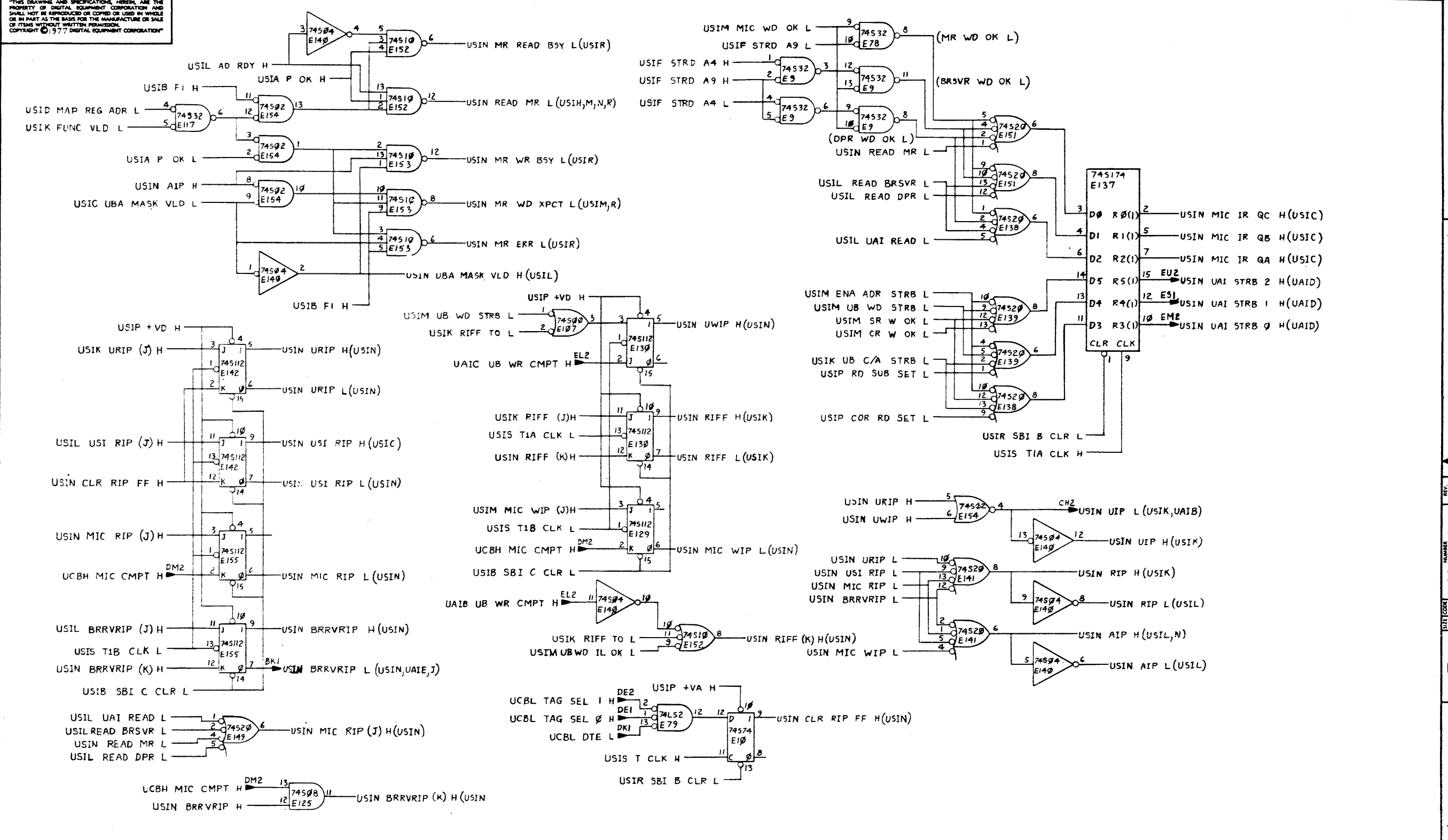
REVISIONS		
CHK	CHANGE NO.	REV.

(WRITE DATA EXPECTED LOGIC) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIM)	SIZE/CODE	D	NUMBER	DCS M8270-0-1	REV.	D
SCALE	1:1	SHEET	15 OF 19	DIST.			

REV. D
DCS M8270-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



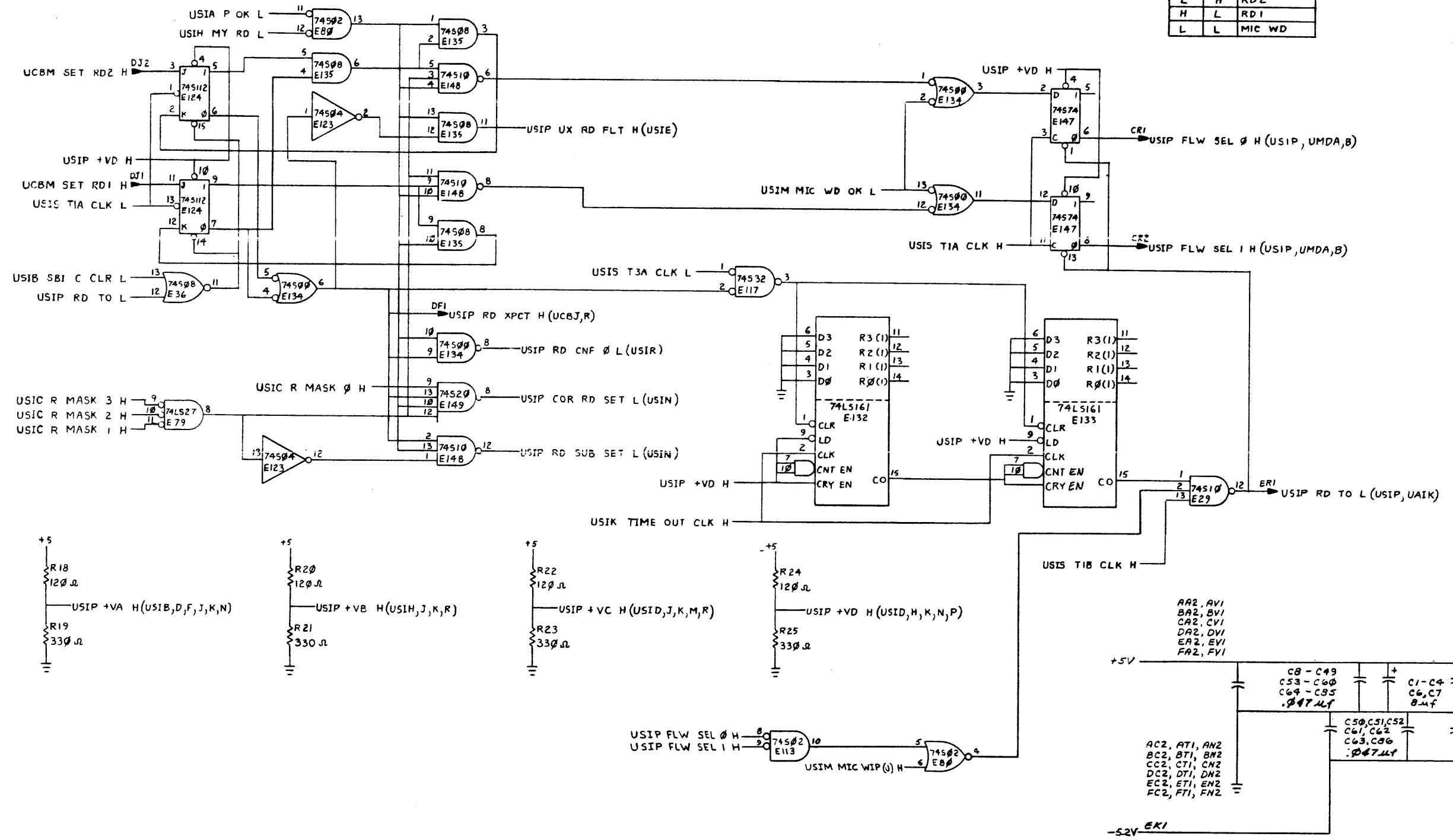
REVISIONS		
CHK	CHANGE NO.	REV.

(MAP REGISTER FUNCTION DECODE, IN PROGRESS FF, FUNCTION ENCODE UAI & UCB) (SLOT 1)

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIN)	SIZE CODE	NUMBER	REV.
SCALE	1:1	SHEET	16 OF 19	D

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

UMD FILE WRITE SEL		
FLW STRB		OPERATION
0	/	NO-OP
H	H	RDZ
L	H	RD1
H	L	RD1
L	L	MIC WD



- AA2, AV1
- BA2, BV1
- CA2, CV1
- DA2, DV1
- EA2, EV1
- FA2, FV1

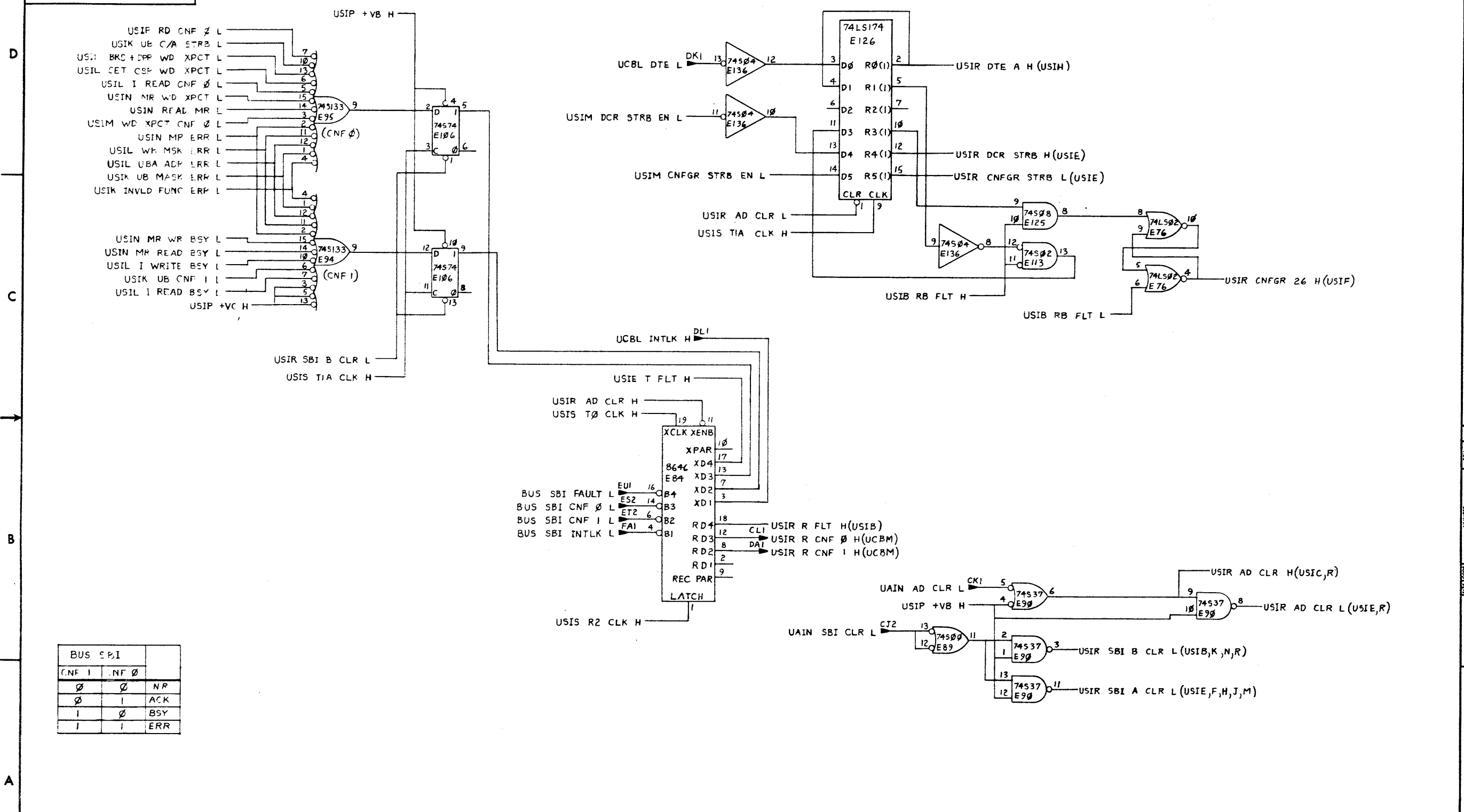
- AC2, AT1, AN2
- BC2, BT1, BN2
- CC2, CT1, CN2
- DC2, DT1, DN2
- EC2, ET1, EN2
- FC2, FT1, FN2

(READ DATA RECEIVED) (SLOT 1)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIP)	SIZE CODE	D	NUMBER	DCS M8270-0-1	REV.	D
SCALE	1:1	SHEET	17 OF 19	DIST.			

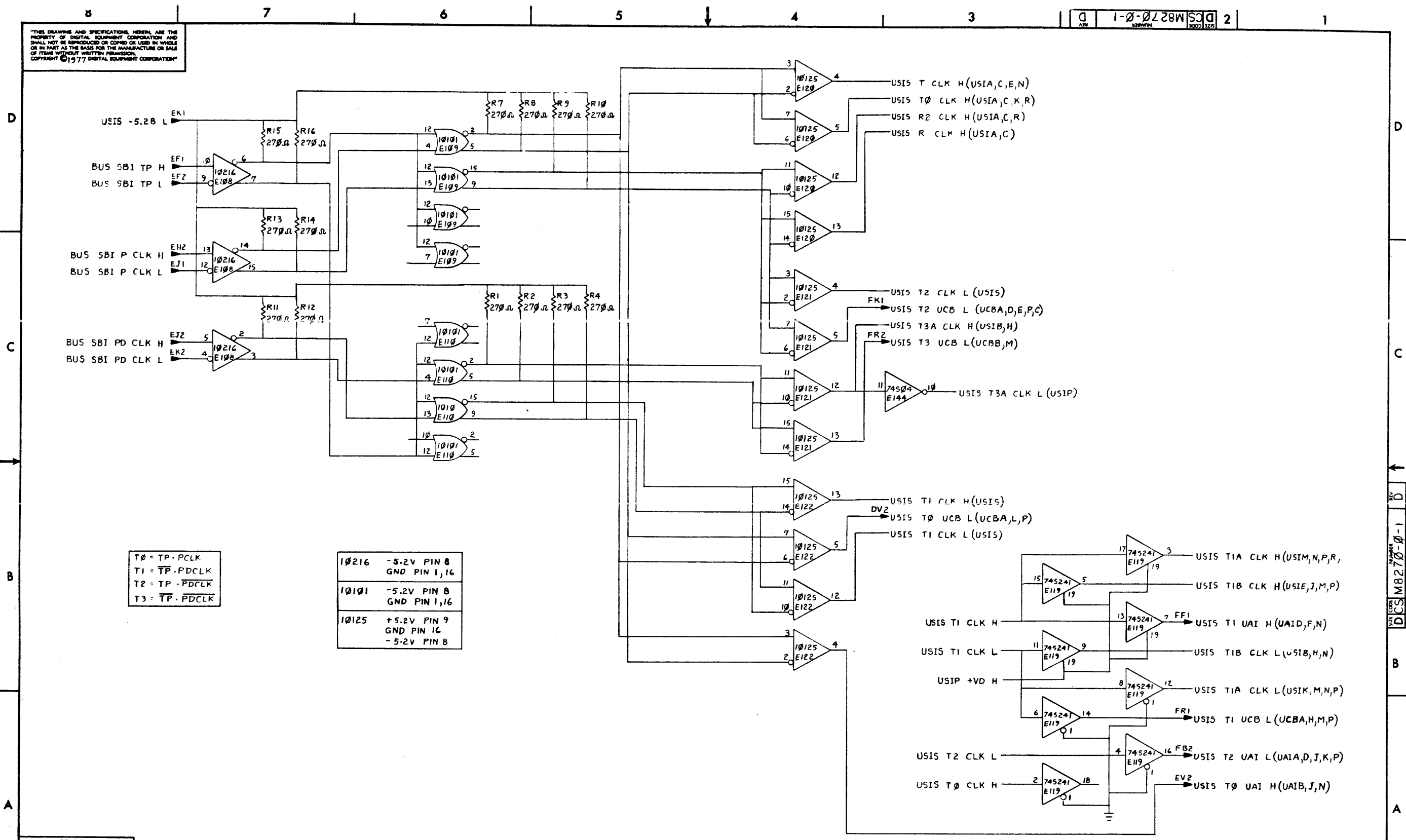
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



BUS SBI		
CNF 1	CNF 0	NR
0	0	NR
0	1	ACK
1	0	BSY
1	1	ERR

REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



T0 = TP · PCLK
 T1 = TP · PDCLK
 T2 = TP · PDCLK
 T3 = TP · PDCLK

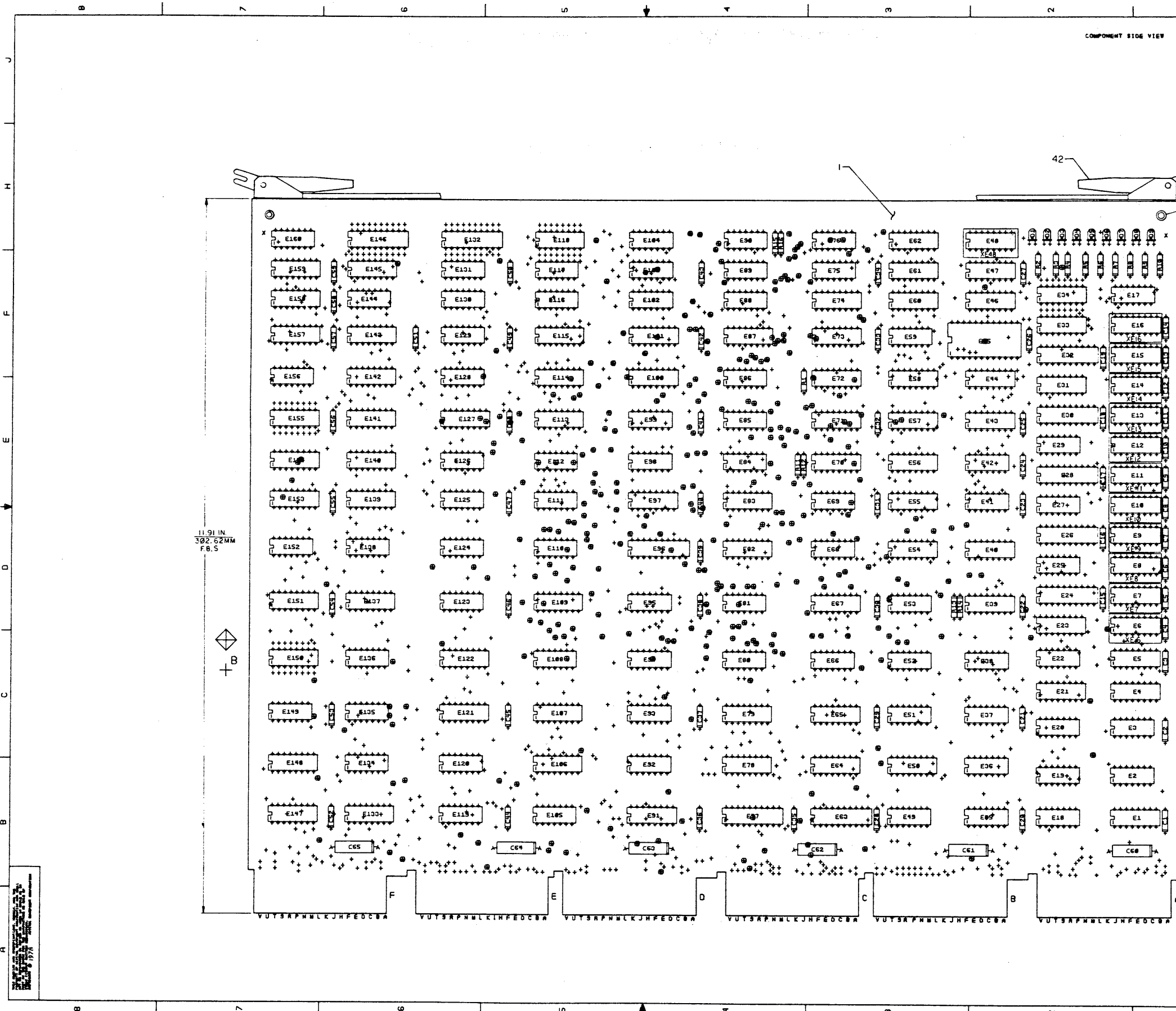
10216	-5.2V PIN 8 GND PIN 1,16
10101	-5.2V PIN 8 GND PIN 1,16
10125	+5.2V PIN 9 GND PIN 16 -5.2V PIN 8

(ECL CLOCKS) (SLOT 1)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UNIBUS ADAPTOR SBI INTERFACE (USIS)	SIZE/COO	DCS M8270-0-1	NUMBER	19 OF 19	REV.	D
SCALE	1/1	SHEET	19 OF 19	DIST.			

REV. D
DCS M8270-0-1

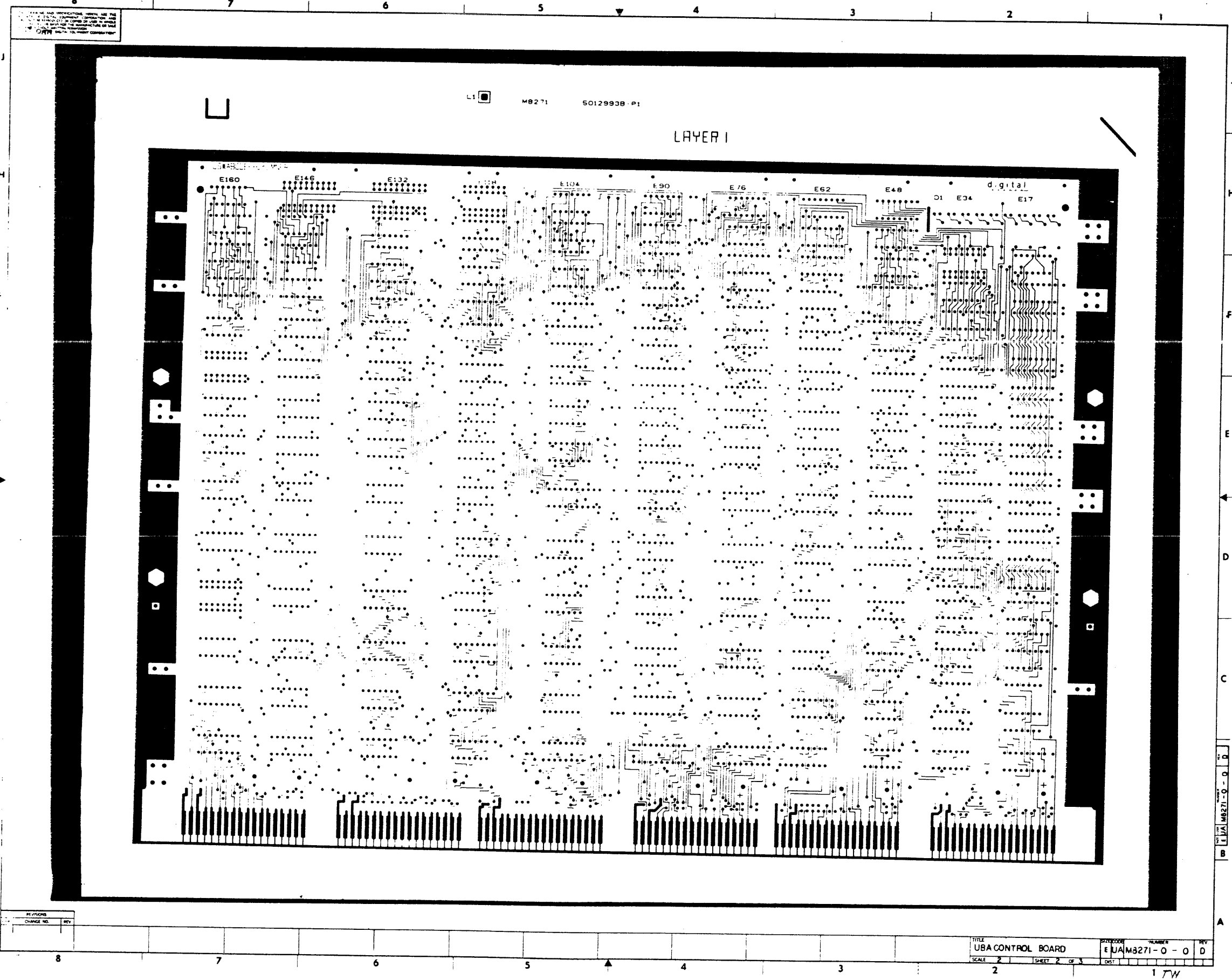


COMPONENT SIDE VIEW

SIGNATURES	DATE	digital	TITLE	UFA	NUMBER
CHK. D.	2/27/78		CONTROL BOARD		EUA M8271-0-0
ENGR.					
PROJ. ENG.					
DESIGNER					
DATE					
REV.					
REV. NO.					
REV. DATE					
REV. BY					
REV. CHECKED					
REV. APPROVED					

NOTES:

EUA M8271-0-0 D



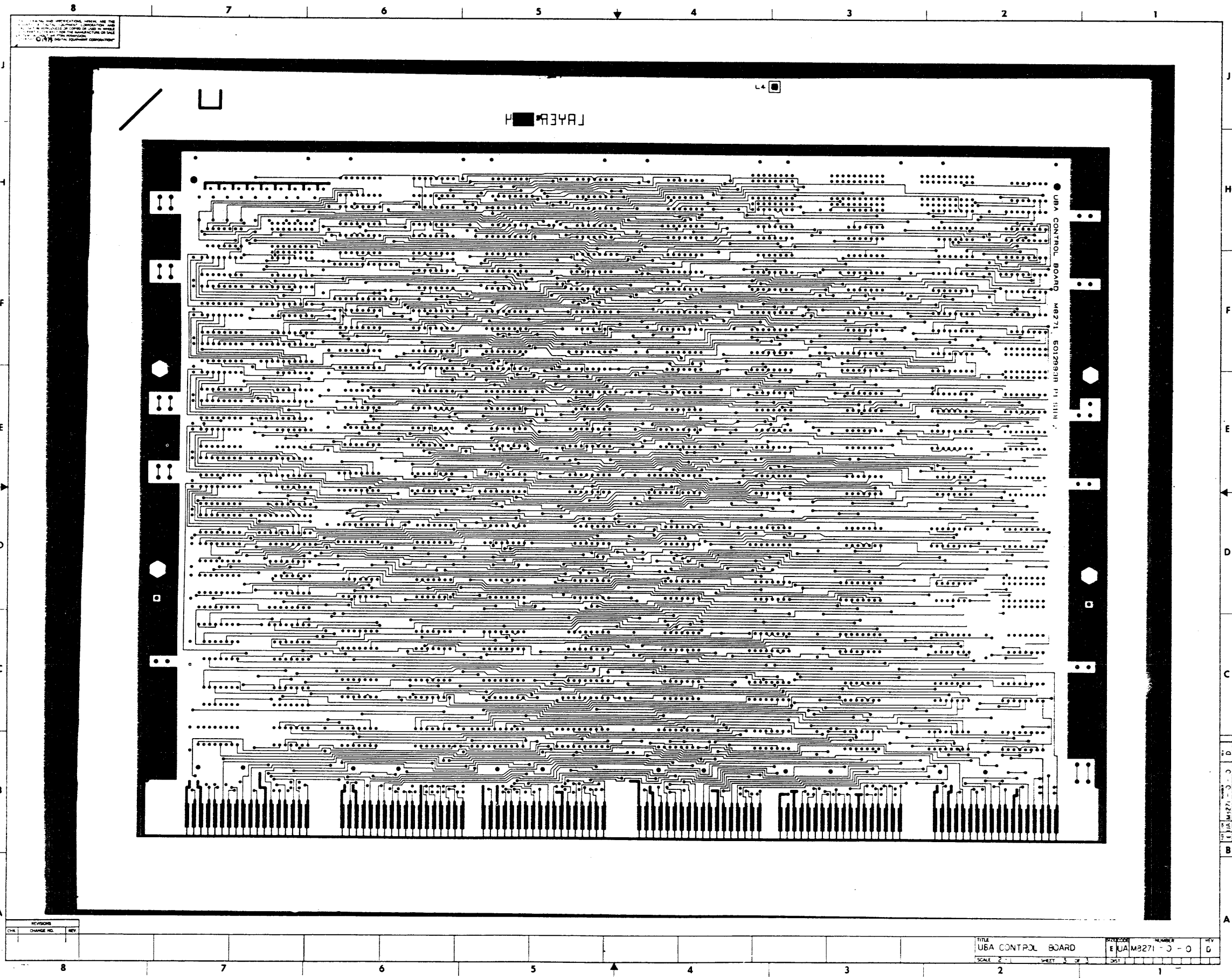
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.
 3. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 4. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 5. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 6. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 7. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 8. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 9. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 10. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 11. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 12. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 13. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 14. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 15. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 16. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 17. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 18. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 19. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.
 20. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED.

L1 M8271 50129938-P1

LAYER 1

REV	CHANGE NO.	DESCRIPTION

TITLE	UBA CONTROL BOARD	SIZE/CODE	EUA	NUMBER	M8271-0-0	REV	D
SCALE	2	SHEET	2	OF	3	DIST	1 JW



STANDARD AND SPECIFICATIONS, REFER TO THE
 MIL-STD-2000, PART 20, SUBPART 20.20.1
 FOR THE REQUIREMENTS OF THIS BOARD.
 THE MANUFACTURE OF THIS BOARD
 SHALL BE IN ACCORDANCE WITH THE
 MIL-STD-2000, PART 20, SUBPART 20.20.1
 REQUIREMENTS.

CHK	CHANGE NO.	REV

TITLE UBA CONTROL BOARD
 NUMBER EJA M8271 - 0 - 0
 SCALE 2:1 SHEET 3 OF 3
 DATE 1971

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	REFERENCE DESIGNATOR
					00	
1	1	E-MD-5012993-0-0	5012993-00	M8271 PC BRD	1	
2	2		1012784-00	.047 MFD 50V +80-20% CER	59	C1-C59
3	3		1012084-01	8 MFD 25V +75-10% AL EL	6	C60-C65
4	4		1110324-00	LED 1MCD@10MA PIV=3	9	D1-D9
5	5		1300365-00	1.0 K .25 W 5.0 % CC	1	R1
6	6		1300247-00	120.0 .25 W 5.0 % CC	3	R11, R13, R15
7	7		1300295-00	330.0 .25 W 5.0 % CC	3	R12, R14, R16
8	8		1300316-00	470.0 .25 W 5.0 % CC	9	R2-R10
9	9		1910532-00	74500 NAND GATE-QUAD 2IN	15	E68, E136, E123, E108, E98, E131, E125, E81, E105, E37, E99, E86, E49, E130, E138
10	10		1912388-00	74502 NOR GATE-QUAD 2IN, PO	11	E25, E51, E93, E156, E120, E119, E144, E160, E75, E88, E112
11	11		1910534-00	74504 INVERTER GATE-HEX 1I	11	E22, E27, E135, E128, E3, E110, E36, E104, E29, E17, E85
12	12		1912389-00	74508 AND GATE-QUAD 2IN, PO	5	E41, E126, E94, E103, E59
13	13		1910536-00	74510 NAND GATE-TRIPLE 3IN	8	E20, E95, E129, E117, E124, E76, E35, E89
14	14		1910537-00	74511 AND GATE-TRIPLE 3IMP	1	E134
15	15		1910539-00	74520 NAND GATE-DUAL 4INPU	3	E53, E80, E102
16	16		1913340-00	74532 OR GATE-QUAD 2IN	3	E2, E52, E92
17	17		1912746-00	DEC 74537 NAND GATE-QUAD 2IN	2	E18, E66
18	18		1910542-00	74564 A-O-I GATE 4-2-3-2	1	E38
19	19		1910544-00	74574 FF-D DUAL, EDGE TRIGG	4	E90, E111, E149, E152
20	20		1912089-00	74585 CMPRTR-4BIT MAGNITUD	1	E127
21	21		1215006-02	SOCKET 16PIN IC LOW PROFILE	1	XE48
22	22		1910545-00	745112 FF-JK DUAL, EDGE TRIG	9	E39, E55, E65, E54, E67, E82, E97, E62, E153
23	23		1911675-00	745138 DECODER/DEMUX 3-8 LIN	4	E4, E23, E73, E74
24	24		1910547-00	745153 MUX 1 OF 4 (DUAL)	8	E21, E44, E46, E47, E60, E71, E121,

REVISION HISTORY		BASIC PART NO: M8271		DRN: G. TYNES		DATE: 11 DEC 78		D I G I T A L	
ENG	ECO NUMBER	REV	SECTION A OF A	CHK'D:	E.T. GERRY	DATE:	11 DEC 78	TITLE	PARTS LIST
P.G.	00002	B	SECTION VARIATION INDEX	DES. ENG:	B. SIMS <td>DATE:</td> <td>11 DEC 78 <td>UCB <td></td> </td></td>	DATE:	11 DEC 78 <td>UCB <td></td> </td>	UCB <td></td>	
PG	00003	C	[A] 00	RESP. ENG.:	R. CASABONA <td>DATE:</td> <td>11 DEC 78 <td>DOCUMENT NUMBER</td> <td></td> </td>	DATE:	11 DEC 78 <td>DOCUMENT NUMBER</td> <td></td>	DOCUMENT NUMBER	
BH	M8271-TW004	D	[B]	MFG. ENG.:	B. SIMS <td>DATE:</td> <td>11 DEC 78 <td>SIZE: CODE: NUMBER</td> <td>REV</td> </td>	DATE:	11 DEC 78 <td>SIZE: CODE: NUMBER</td> <td>REV</td>	SIZE: CODE: NUMBER	REV
DR	M8271-TW005	E	[C]	ASSEMBLY NUMBER:	D-UA-M8271-0-0 <td>TOP DOCUMENT NUMBER:</td> <td></td> <td>K PL M8271-0-DBP</td> <td>E</td>	TOP DOCUMENT NUMBER:		K PL M8271-0-DBP	E
			[D]			FILE NAME:		Z0639.PLS	29
			[E]			EDIT #			
			[F]						
			[H]						
			[J]						
			[K]						
			[L]						
			[M]						
			[N]						

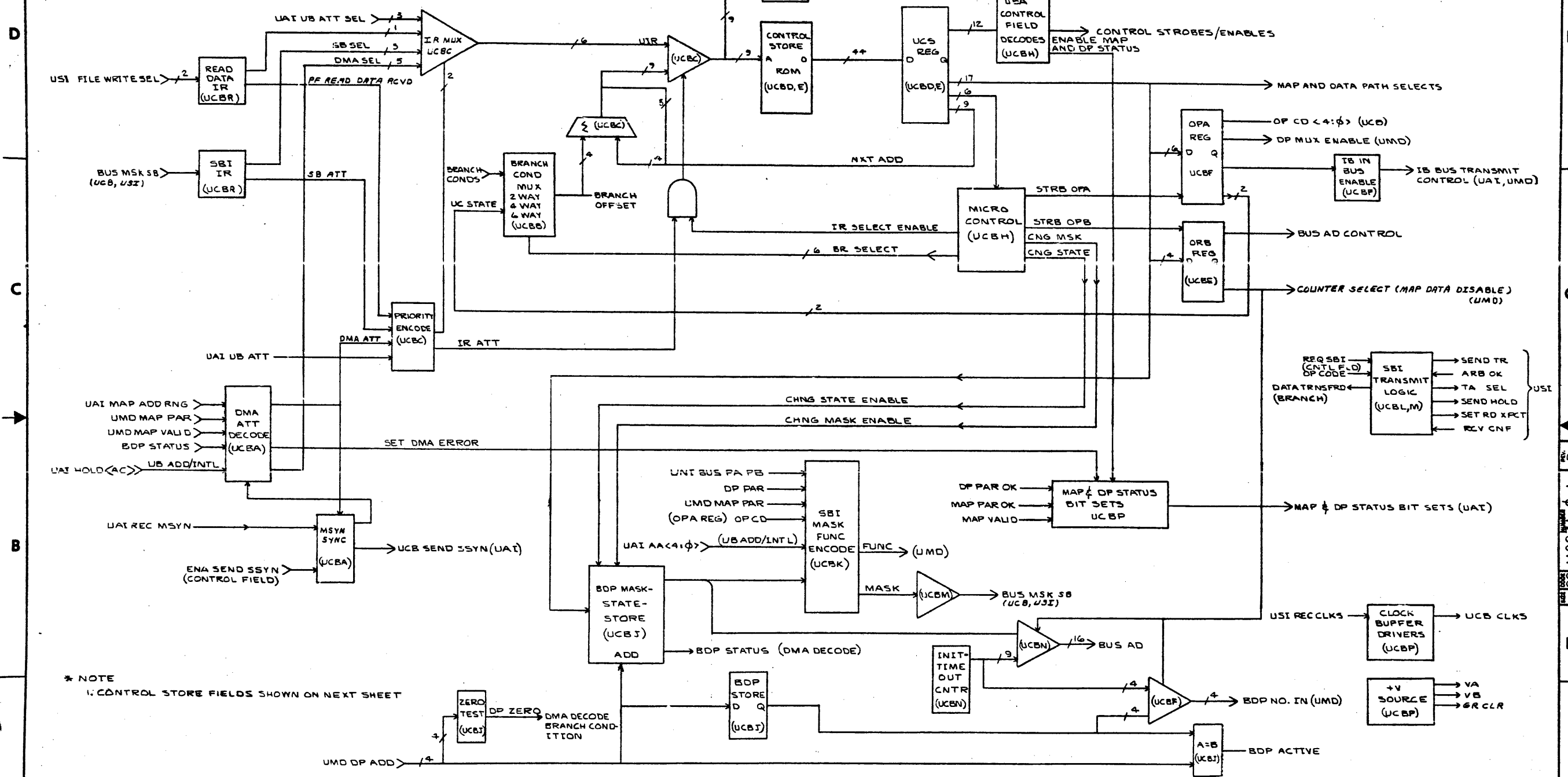
"THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1981. DIGITAL EQUIPMENT CORPORATION"

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	REFERENCE DESIGNATOR
					00	
25	25		1910548-00	74S157 MUX 1 OF 2 (QUAD)	6	CONT E122
26	26		1910550-00	74S174 FF-D HEX	8	E31,E33,E91,E113,E133,E142
27	27		1910957-00	74S175 FF-D QUAD COMMON CLO	2	CONT E141
28	28		1910531-00	DEC 74S181 ALU-4BIT	1	E78,E109
29	29		1912661-00	74S189 MEMORY READ/WRITE	3	E45
30	30		1913493-00	74S241 OCTAL BUFFER, TRI-STA	2	E143, E157, E158
31	31		1912728-00	74S251 MUX 1 OF 8 TRI-STA	6	E63, E77
32	32		1912660-00	74S253 MUX 1 OF 4 (DUAL)	1	E57, E72, E87, E100, E101, E107
33	33		1911641-00	SN 74S257 MUX, QUAD 2 TO 1	5	E43
34	34		1913671-00	74S374 FF-D OCTAL TRISTATE	6	E58, E137, E147, E148, E151
35	35		1913294-00	93S16 COUNTER, SYNCH UP BIN	3	E24, E26, E28, E30, E32, E96
36	36		1911574-00	8641 TRANSCIEVER, BUS, QUA	1	E139, E140, E154
37	37		1912796-00	74148 EXCODER, PRIORITY, 8 T	1	E1
38	38		1912813-00	LS27 NOR GATE-TRIPLE 3IN	2	E56
39	39		1912820-00	LS51 A-0-1 GATE 2-WIDE 2I	3	E69, E84
40	40		1912853-00	LS175 FF-D QUAD	3	E19, E42, E116
41	41		1912860-00	LS259 LATCH 8BIT	2	E5, E70, E79
42	42		1210711-02	/REPLACED BY 12-16988-02	1	E50, E106
43	43		9000024-01	EYELET, ROLL FLANGE .1210DX .192	12	
44	44		23586A9-00	A9-01	1	E6
45	45		23699A9-00	A9-01	1	E7
46	46		23687A9-00	A9-01	1	E8
47	47		23589A9-00	A9-01	1	E9
48	48		23590A9-00	A9-01	1	E10
49	49		23685A9-00	A9-01	1	E11
50	50		23700A9-00	A9-01	1	E12
51	51		23672A9-00	A9-01	1	E13
52	52		23673A9-00	A9-01	1	E14
53	53		23670A9-00	A9-01	1	E15
54	54		23701A9-00	A9-01	1	E16
55	55		23215A1-00	A1-07	1	E145
56	56		9105740-55	*** THIS ITEM IS NOT USED ***	-	

57 NOTE: E34, E118, E132, E146, E150, E155 ARE SPARE I.C. LOCATIONS.

D	I	G	I	T	A	L	TITLE	UCB	SECTION A	OF A	SIZE	CODE	DOCUMENT NUMBER	REV
											K	PL	M8271-D-DBP	E

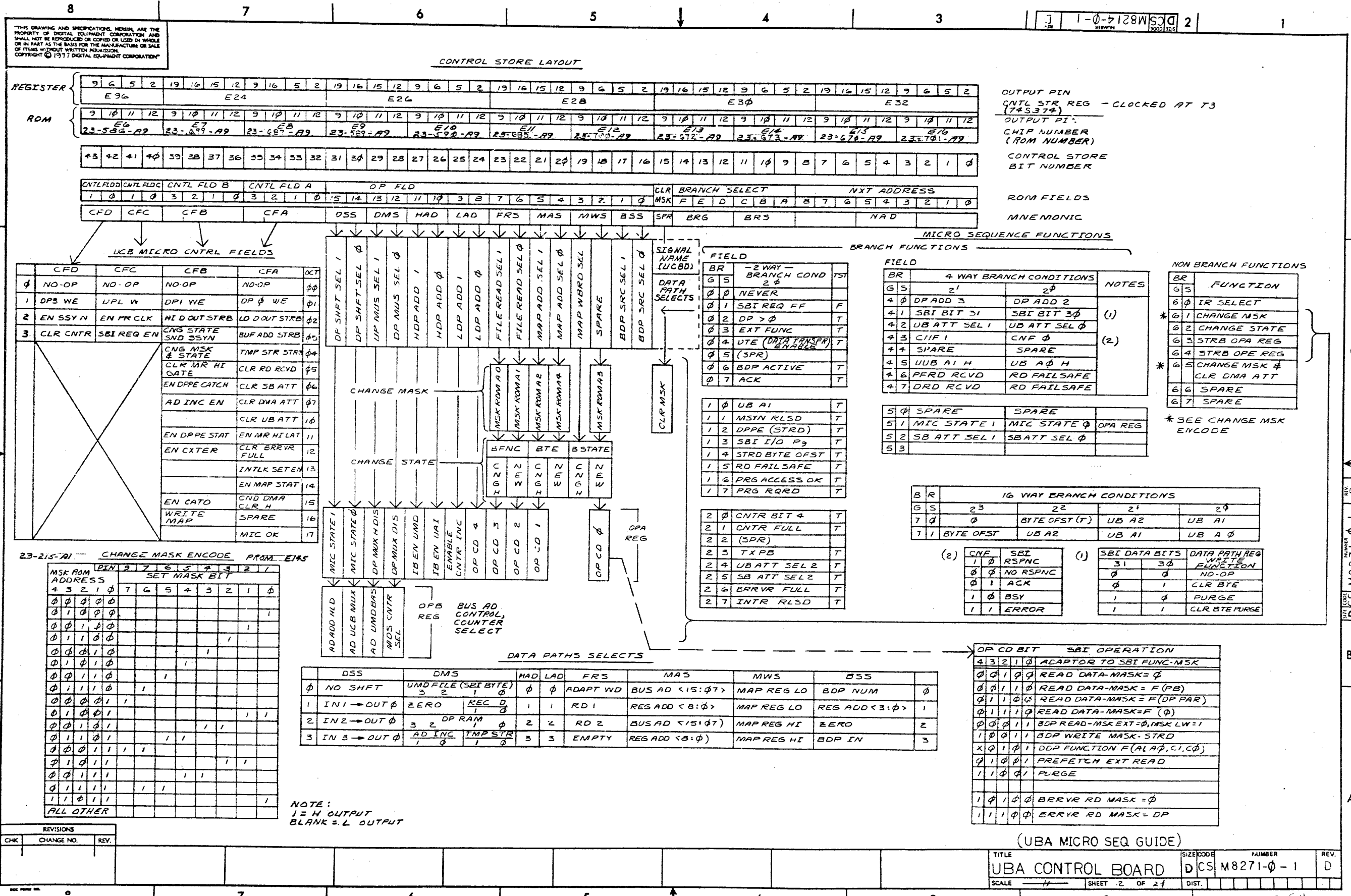
THIS DRAWING AND SPECIFICATIONS HEREAFTER ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN ANY MANNER OR IN ANY MEDIUM WITHOUT THE WRITTEN PERMISSION OF DIGITAL EQUIPMENT CORPORATION © 1977



* NOTE
1. CONTROL STORE FIELDS SHOWN ON NEXT SHEET

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

BLOCK DIAGRAM			
DRN. #	6-1-77	FIRST USED ON	11780
CHK'D		TITLE	UBA CONTROL BOARD
ENGR.		PROD. ENGR.	
PROD. ENGR.		NEXT HIGHER ASSY.	
DW 780	SIZE	CODE	NUMBER
SCALE	D	CS	M8271-0-1
SHEET	1	OF 2	D



REVISIONS

CHK	CHANGE NO.	REV.

NOTE:
1 = H OUTPUT
BLANK = L OUTPUT

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

DATA PATH SHIFTER INPUTS (SOURCES)

DMS <1:0>	SFTR BYTE 0	SFTR BYTE 1	SFTR BYTE 2	SFTR BYTE 3
4 BYTES OF SBI DATA	φ	FILE (φ) [SBI DATA]	FILE (1)	FILE (2)
2 BYTES OF UNIBUS DATA	1	RECD (φ)	RECD (1)	φ
4 BYTES OF DATA PATH RAM	2	DP RAM (φ)	DP RAM (1)	DP RAM (2)
2 BYTES WRAP AROUND 2 BYTES INC UB ADR	3	TMP STR (φ)	TMP STR (1)	ADR INC (φ)

4 BYTES OF SBI DATA
2 BYTES OF UNIBUS DATA
4 BYTES OF DATA PATH RAM
2 BYTES WRAP AROUND
2 BYTES INC UB ADR

DATA PATH SHIFTER OUTPUTS

DP BYTE (φ)	DP BYTE (1)	DP BYTE (2)	DP BYTE (3)
TMPSTR (φ)	TMPSTR (1)	UB DATA (φ) <7:0>	UB DATA (1) <15:8>
		BUFFER ADDRESS STORE <09:02>	BUFFER ADDRESS STORE <17:10>
DP RAM (φ)	DP RAM (1)	DP RAM (2)	DP RAM (3)
BUS IB (φ)	BUS IB (1)	BUS IB (2)	BUS IB (3)

DESTINATIONS (TARGET)

SHIFTER BYTE OUTPUT

DSS <1:0>	SFTR (φ) OUT	SFTR (1) OUT	SFTR (2) OUT	SFTR (3) OUT
φ	SFTR (φ) IN	SFTR (1) IN	SFTR (2) IN	SFTR (3) IN
1	SFTR (1) IN	SFTR (2) IN	SFTR (3) IN	SFTR (φ) IN
2	SFTR (2) IN	SFTR (3) IN	SFTR (φ) IN	SFTR (1) IN
3	SFTR (3) IN	SFTR (φ) IN	SFTR (1) IN	SFTR (2) IN

SHIFTER CONTROL

DATA PATH RAM ORGANIZATION

CONTROL STORE BITS L ADD <1:0> BUFFERED DATA PATH ORGANIZATION 1-15 CONTROL STORE BITS H ADD <1:0>

DP AD <5:2> = 1-15	3	2	1	φ
	16 BITS OF UB ADR <17:02> FOR DATA PATH REG			
	BYTE OFFSET TEMP BUFFER			
	BUFFER DATA PATH LONG WORD 2 BYTE 4 BYTE 5 BYTE 6 BYTE 7			
	BUFFER DATA PATH LONG WORD 1 BYTE φ BYTE 1 BYTE 2 BYTE 3			
DATA PATH RAM BYTE	φ	1	2	3

CONTROL STORE BITS L ADD <1:0> BARR/BASVR ORGANIZATION CONTROL STORE BITS H ADD <1:0>

DP AD <5:2> = φ	3	2	1	φ
	BRRVR #6	BRRVR #7		
	BRRVR #4	BRRVR #5		
	BRSVR #2	BRSVR #3		
	BRSVR #φ	BRSVR #1		
DATA PATH RAM BYTE	φ	1	2	3

(DATA PATH ORGANIZATION)

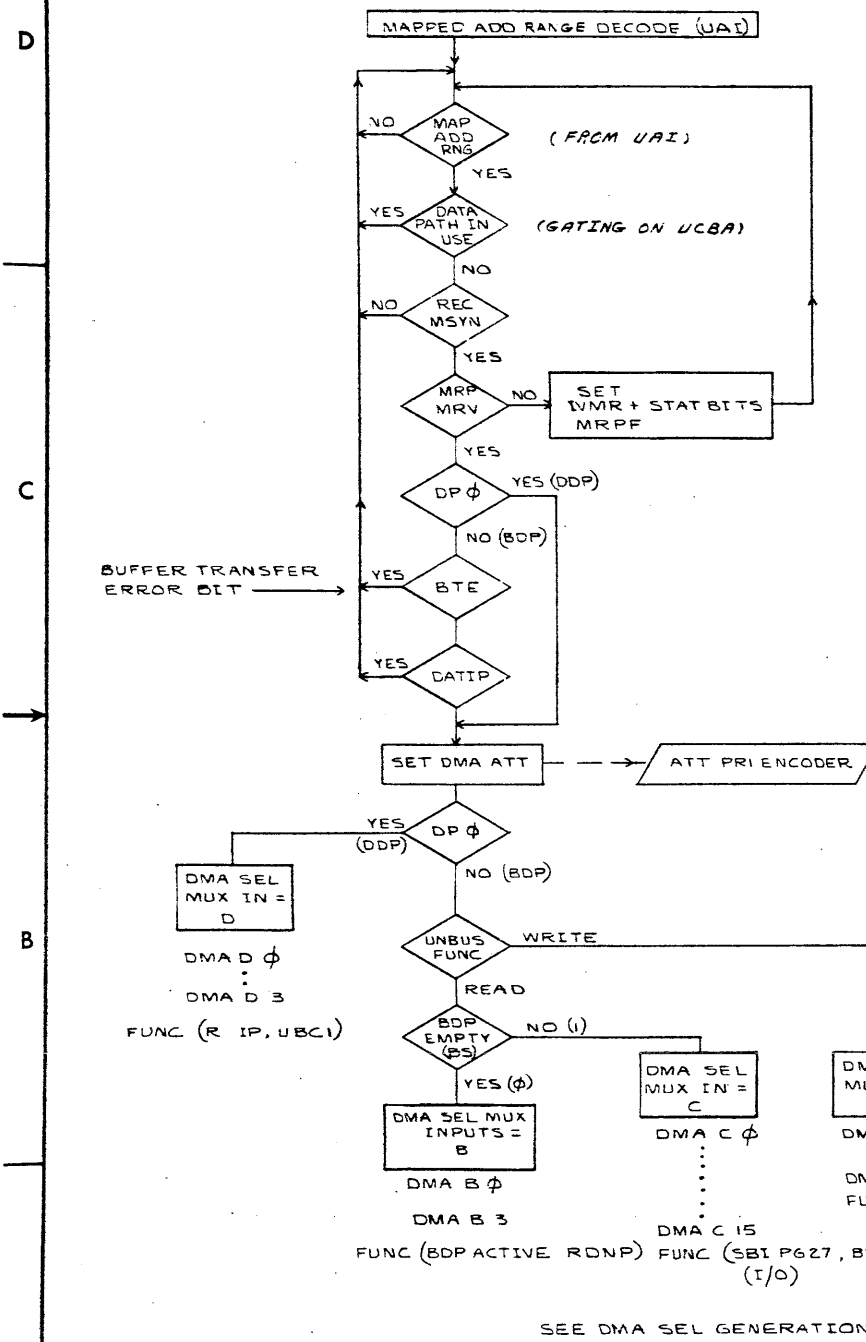
REVISIONS		
CHEK	CHANGE NO.	REV.

TITLE	UBA CONTROL BOARD	SIZE CODE	DCS	NUMBER	M8271-0-1	REV.	D
SCALE		SHEET	3	OF	21	DIST.	

DCS M8271-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

UNIBUS ACCESS TO THE ENABLED MAPPED MEMORY ADDRESS SPACE (LOGIC OR UCBA)



MICRO TR MUX INPUTS (UCBC) START ADDRESS GENERATION (UCBC)

MIC PROG ADD

ADD BITS	B	7	6	5	4	3	2	1	φ
A	φ	φ	φ	φ	φ	φ	φ	φ	DMA SEL

SEE DMA SEL GENERATION

UAI

C	φ	φ	φ	1	φ	1	φ	UB ATT	
D	φ	φ	φ	1	1	φ	φ	SB ATT	
B	φ	φ	φ	1	1	1	φ	φ	BO*

UCBR (FROM SBI)
* STORED BYTE OFST

ATT INPUT - IR MUX INPUT SEL - PRIORITY

DMA ATT	A	3
PREFETCH RD B RCVD	B	2
UAI UB ATT	C	1
SB ATT	D	φ LOWEST

DMA SEL GENERATION (UCBA)

DMA MUX INPUT (FROM FLOW)	BIT (DMA SEL)				
	4	3	2	1	φ
DMA D - D	φ	φ	1	RDIP (RDIPCT+PFRD RCVR)	UB C1
DMA B - B	φ	1	φ	BDP ACTIVE	RDIP
DMA A - A	φ	1	1	SBI PG-27 (I/O-H)	UB Cφ
DMA C - C	1	SBI PG27 (I/O-H)	BYTE OFST	UB A 2	UB A1

MICRO CNTL START ADDRESSES

START ADD(B)	IR SEL	FLOW SYMBOL	INSTRUCTION
φ	X	CLR UBA	INITIALIZE UBA
1	X		RSVD
2	X		RSVD
3	X	STRT	BR(IR) ATT
4	A	DMA Dφ	SBI READ (DDP) BDP DMA
5		DMA D1	SBI WRITE (DDP) BOP
6		DMA D2	STORE RD, SBI READ (DDP) BOP READ
7		DMA D3	SBI WRITE = D1 BOP
10		DMA Bφ	SBI READ (BDP) BOP EMPTY
11		DMA B1	STORE RD SBI READ (BDP) BOP
12		DMA B2	SBI READ (DDP) = Bφ
13		DMA B3	WAIT RD RTN
14		DMA Aφ	MEM DATO BDP WRITE
15	X	DMA A1	MEM DATO B
16		DMA A2	I/O DATO
17		DMA A3	I/O DATO B
20		DMA Cφ	DATI B01 MEM BDP READ
21		DMA C1	DATI B23 MEM
22		DMA C2	DATI B45 MEM BDP CONTAINS DATA
23		DMA C3	DATI B67 MEM
24		DMA C4	DATI B12 MEM (BYTE OFST)
25		DMA C5	DATI B34 MEM
26		DMA C6	DATI B56 MEM
27		DMA C7	DATI B7- Bφ MEM
30		DMA C8	SBI BDP READ, DATI Bφ1
31		DMA C9	DATI B23 I/O
32		DMA C10	SBI BDP READ, DATI Bφ1 = C8
33		DMA C11	DATI B23 I/O = C9
34		DMA C12	SBI BDP READ DATI Bφ1 = C8
35		DMA C13	DATI B23 I/O = C9
36		DMA C14	SBI BDP READ DATI Bφ1 = C8
37	A	DMA C15	DATI B23 I/O = C9
40	Cφ		
41	Cφ		
42			
43			
44			
45			
46			
47	Cφ		
50	C1	UBC φ	MASTER DATI TIMEOUT
51	C1	UBC 1	BRRVR SND RAM
52		UBC 2	MASTER DATI RTN W1 UBC (UAI)
53		UBC 3	MASTER DATI RTN Wφ
54			
55		UBC 5	INTR FLD OK-RTN VECTOR
56			
57	C1	UBC 7	NO-OP
60	D	SB φ	NO-OP
61	D	SB 1	UAI REG READ
62		SB 2	DPR READ
63		SB 3	BRSVR READ SB (UST)
64		SB 4	MAP REG READ
65		SB 5	DPR WRITE
66		SB 6	BRSVR WRITE
67	D	SB 7	MAP REG WRITE
70	B	PF φ	PFRD RCVD
71	B	PF 1	PFRD RCVD BYTE OFST
400	X	CLR UBA	INITIALIZE UBA

(UBA UCB IR DECODE)

REVISIONS

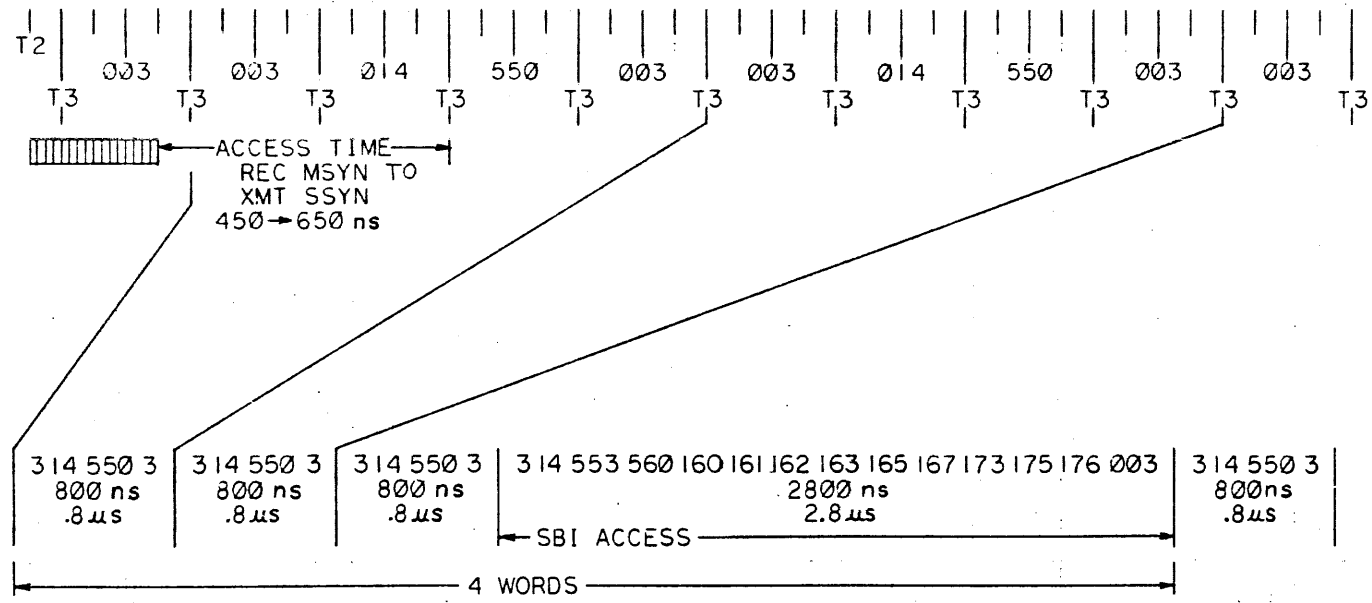
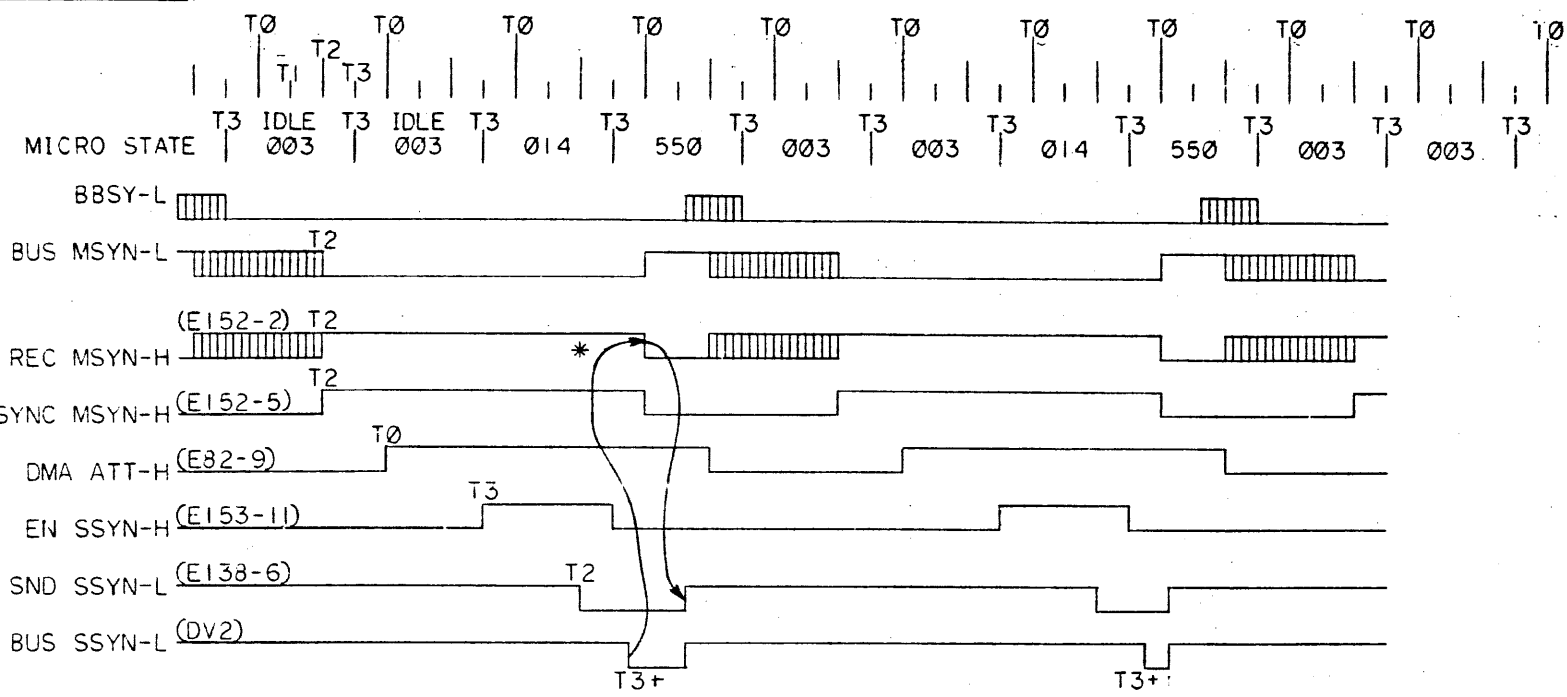
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
UBA CONTROL BOARD	D CS	M8271-φ-1	D
SCALE	SHEET	DIST.	
	4 OF 21		

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1979 DIGITAL EQUIPMENT CORPORATION

D
C
B
A

D
C
B
A



* TIME DELAY IS DUE TO INTERNAL TIME OF EXTERNAL DEVICE.

REV D
DCS M8271-0-1

B

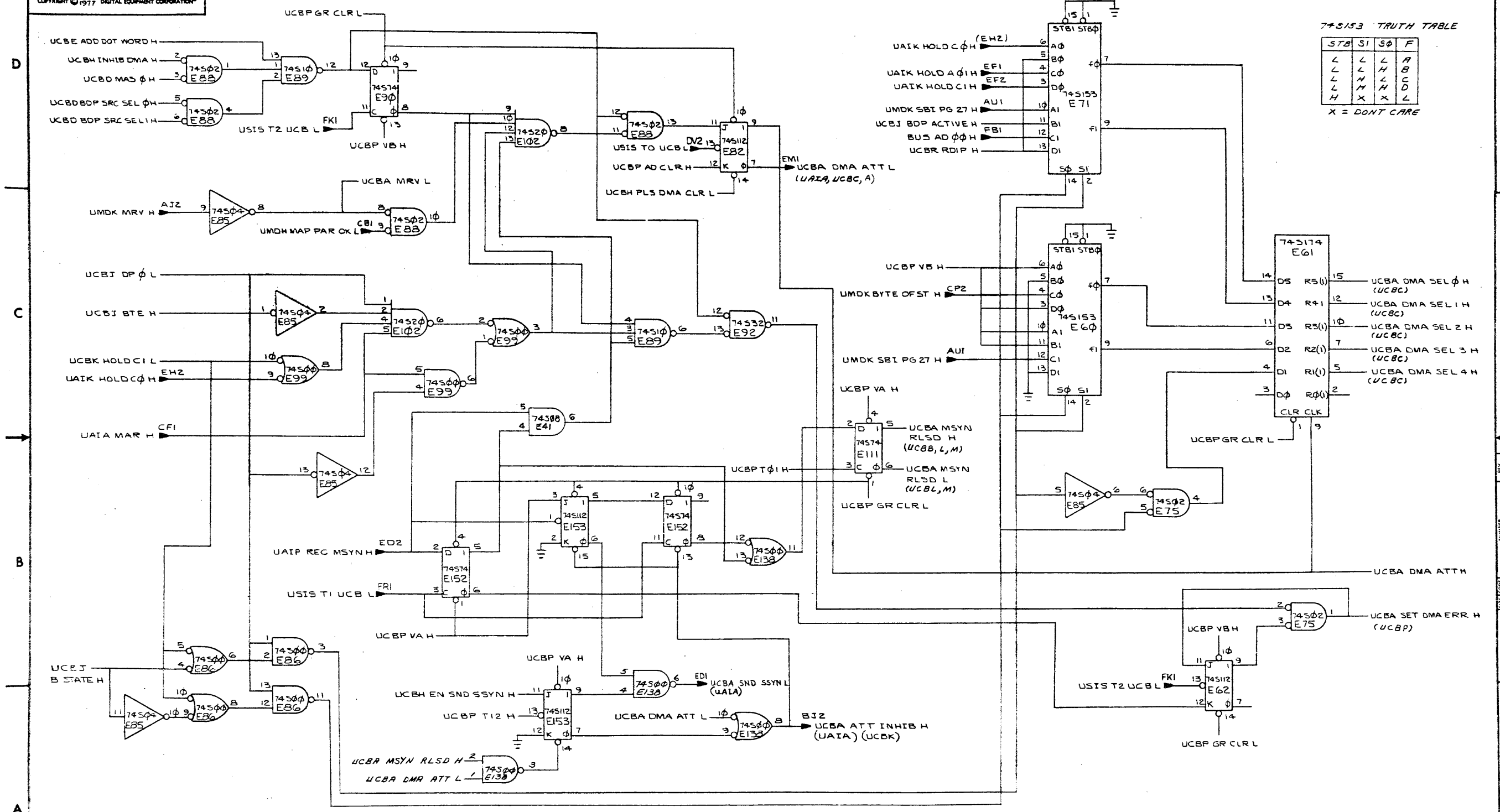
A

REVISION HISTORY		
DATE	ECO NUMBER	REV

TITLE
UNIBUS
ACCESS TIME TIMING

DOCUMENT NUMBER		
SIZE CODE	NUMBER	REV.
DCS	M8271-0-1	D
SCALE	SHEET 5 OF 21	

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



74S153 TRUTH TABLE

STB	SI	Sφ	F
L	L	L	A
L	L	H	B
L	H	L	C
L	H	H	D
H	X	X	L

X = DONT CARE

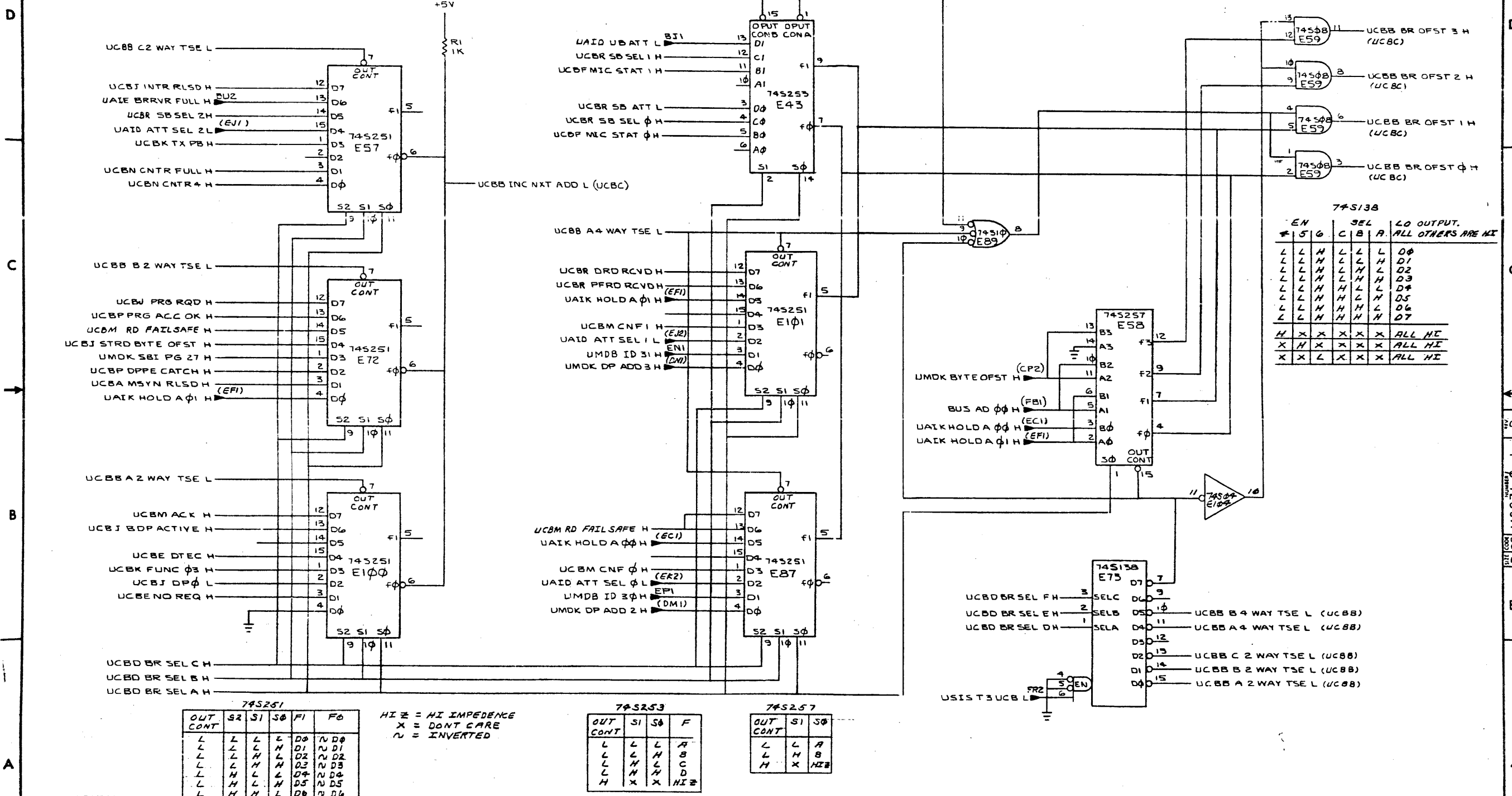
REVISIONS		
CHK	CHANGE NO.	REV.

(DMA IR. DECODE) (SLOT 2)

TITLE UBA CONTROL BOARD (UCBA) SIZE CODE DCS NUMBER M8271-0-1 REV. D

SCALE SHEET 6 OF 21 DIST.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



74S138

EN	S	G	C	B	A	LO OUTPUT
L	L	H	L	L	L	D0
L	L	H	L	L	H	D1
L	L	H	L	H	L	D2
L	L	H	L	H	H	D3
L	L	H	H	L	L	D4
L	L	H	H	L	H	D5
L	L	H	H	H	L	D6
L	L	H	H	H	H	D7
H	X	X	X	X	X	ALL HI
X	H	X	X	X	X	ALL HI
X	X	L	X	X	X	ALL HI

74S251

OUT CONT	S2	S1	S0	F1	F0
L	L	L	L	D0	N D0
L	L	L	H	D1	N D1
L	L	H	L	D2	N D2
L	L	H	H	D3	N D3
L	H	L	L	D4	N D4
L	H	L	H	D5	N D5
L	H	H	L	D6	N D6
L	H	H	H	D7	N D7
H	X	X	X	HI	HI

HI Z = HI IMPEDENCE
X = DONT CARE
N = INVERTED

74S253

OUT CONT	S1	S0	F
L	L	L	A
L	L	H	B
L	H	L	C
L	H	H	D
H	X	X	HI Z

74S257

OUT CONT	S1	S0	F
L	L	L	A
L	L	H	B
L	H	L	C
H	X	X	HI Z

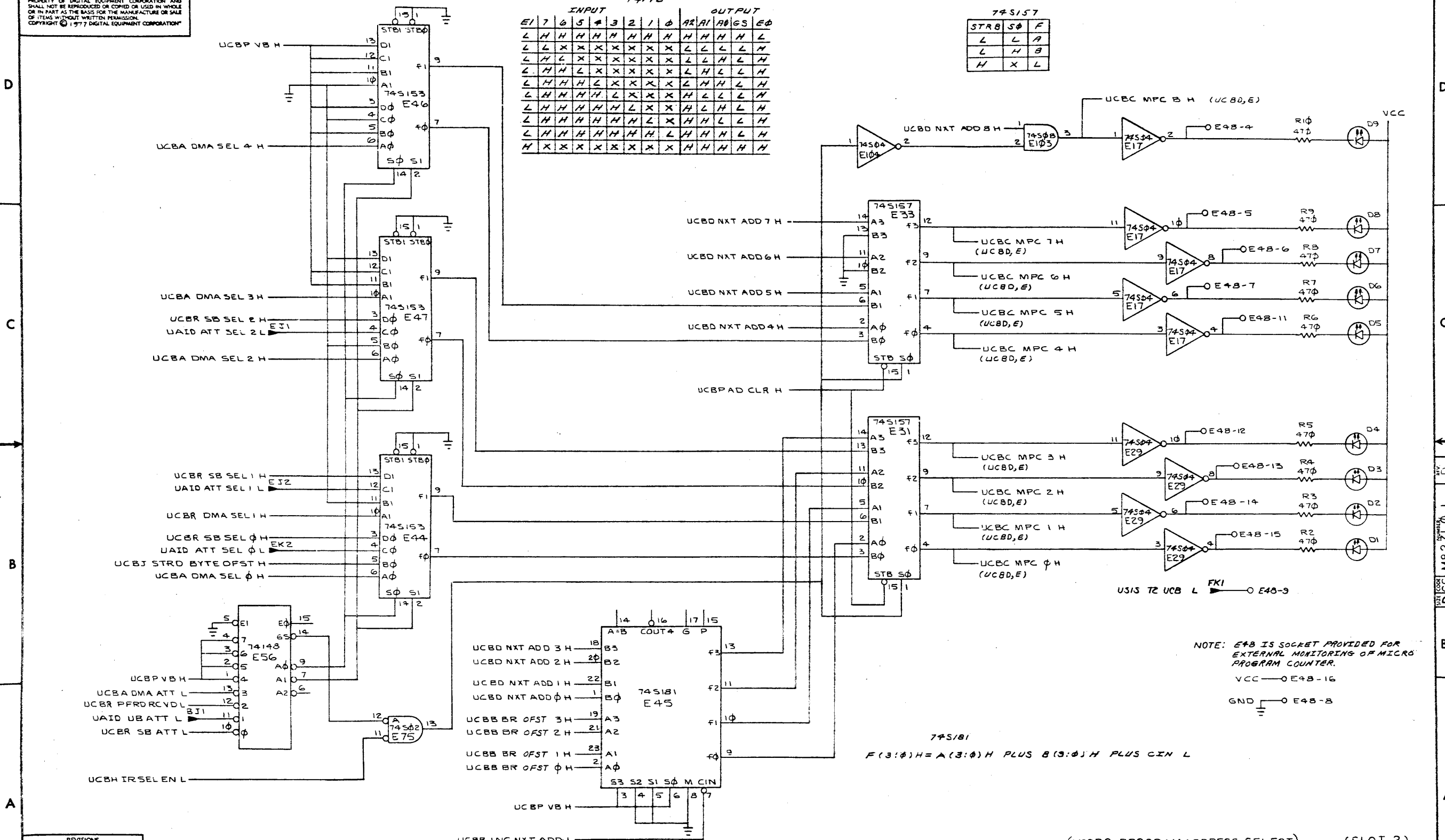
REVISIONS

CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

7414B												
	INPUT						OUTPUT					
E1	7	6	5	4	3	2	1	0	A1	A0	G5	E0
L	H	H	H	H	H	H	H	H	H	H	H	L
L	L	X	X	X	X	X	X	X	L	L	L	L
L	H	L	X	X	X	X	X	X	L	H	L	L
L	H	H	L	X	X	X	X	X	L	H	L	L
L	H	H	H	L	X	X	X	X	L	H	L	L
L	H	H	H	H	L	X	X	X	L	H	L	L
L	H	H	H	H	H	L	X	X	L	H	L	L
L	H	H	H	H	H	H	L	X	L	H	L	L
H	X	X	X	X	X	X	X	X	H	H	H	H

74S157		
STRB	S0	F
L	L	A
L	H	B
H	X	L



NOTE: E+8 IS SOCKET PROVIDED FOR EXTERNAL MONITORING OF MICRO PROGRAM COUNTER.
VCC — 0E48-16
GND — 0E48-8

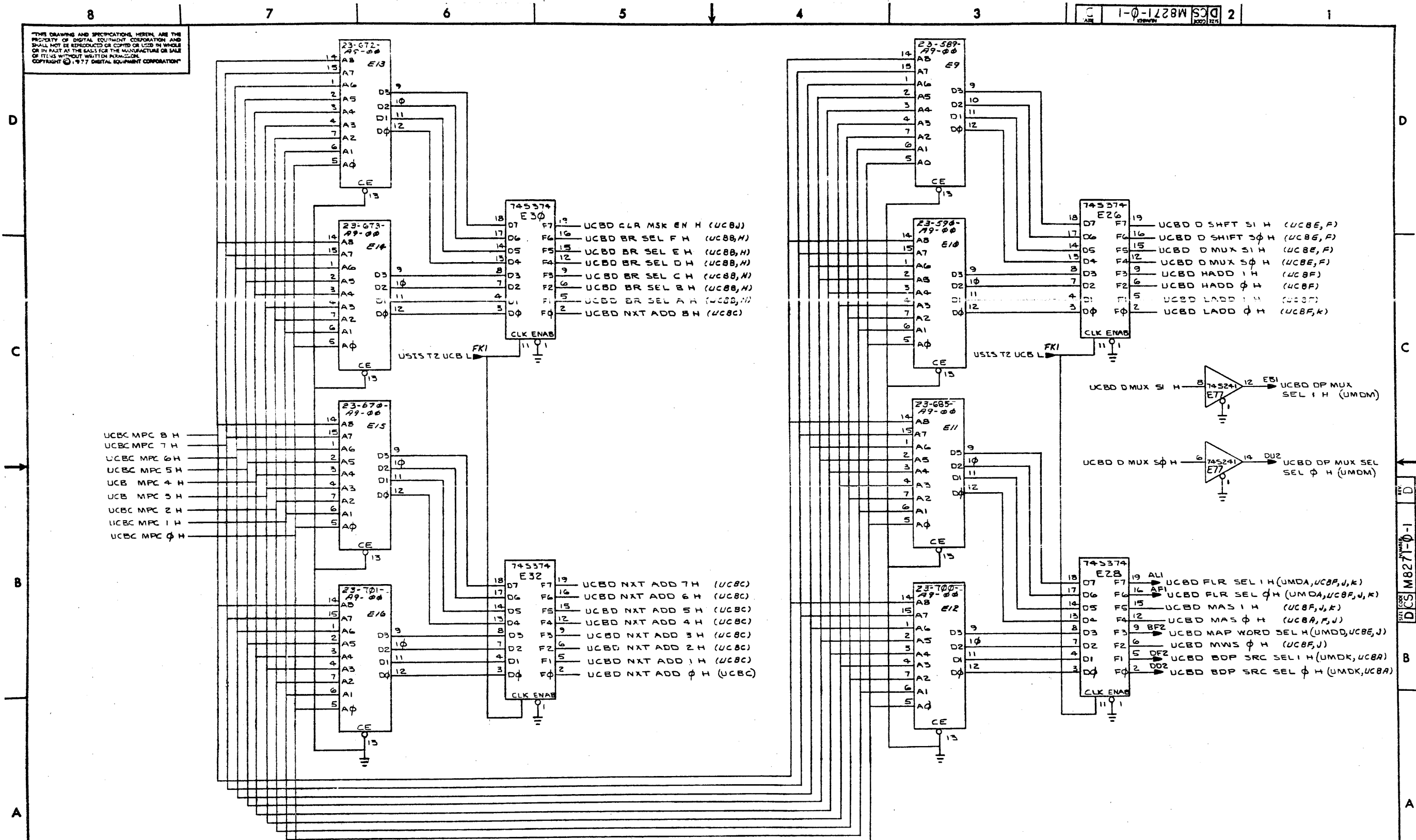
74S181
 $F(3:0)H = A(3:0)H \text{ PLUS } B(3:0)H \text{ PLUS } C_{IN}L$

REVISIONS		
CHK	CHANGE NO.	REV.

(MICRO PROGRAM ADDRESS SELECT)		(SLOT 2)	
TITLE	SIZE	NUMBER	REV.
UBA CONTROL BOARD	DCS	M8271-0-1	D
SCALE	SHEET	DIST.	
	8 OF 21		

DCS M8271-0-1

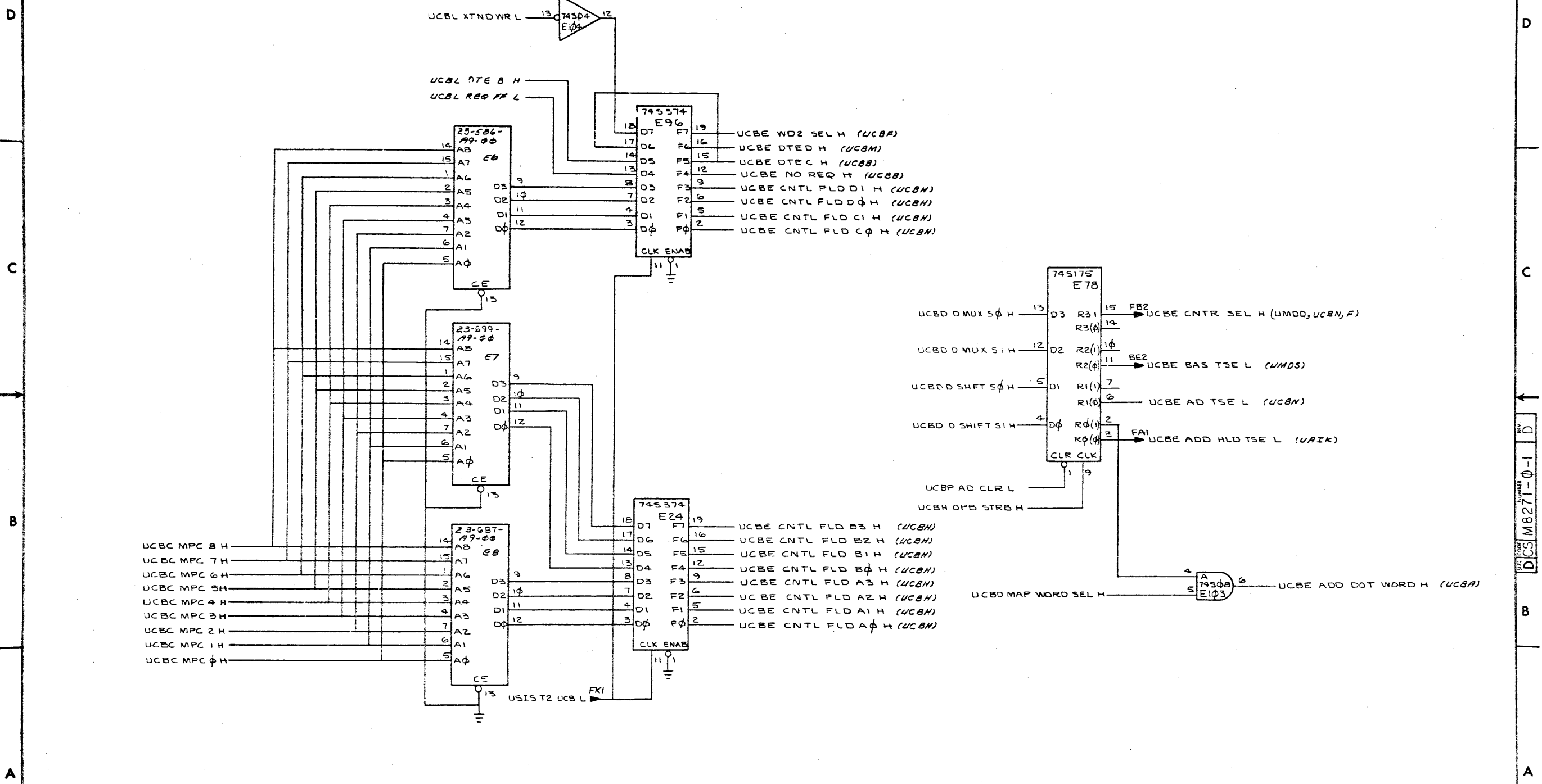
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION.



REVISIONS		
CHK	CHANGE NO.	REV.

(CONTROL STORE)		(SLOT 2)	
TITLE	UCBD	SIZE CODE	NUMBER
UBA CONTROL BOARD	DCS	M8271-0-1	2
SCALE	SHEET	OF	TOTAL
	9	21	

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

(CONTROL STORE)		(SLOT 2)	
TITLE	UCBE	SIZE/CODE	NUMBER
UBA CONTROL BOARD	D CS	M8271-0-1	D
SCALE	SHEET 10 OF 21	DIST.	

D CS M8271-0-1 REV. D

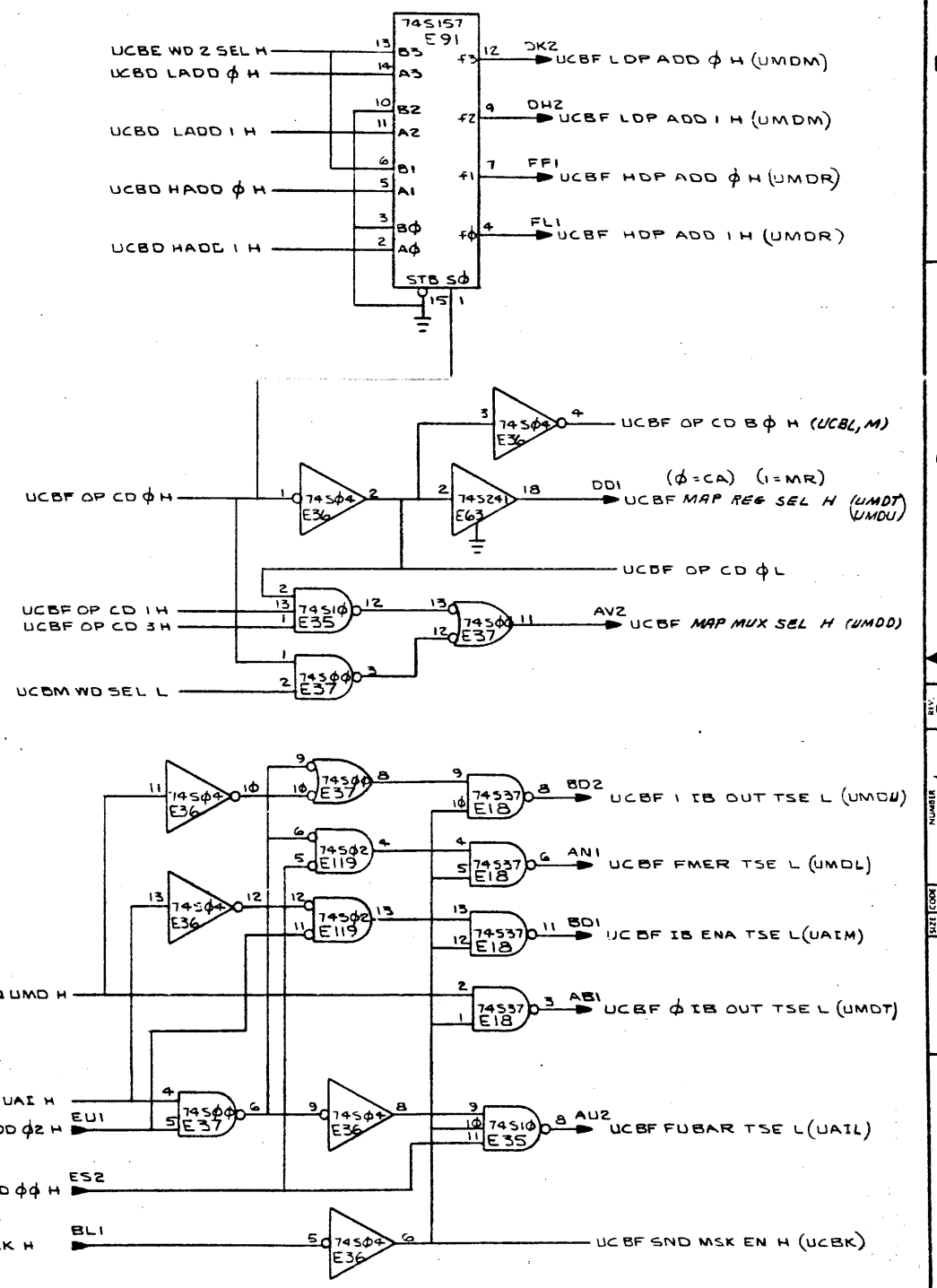
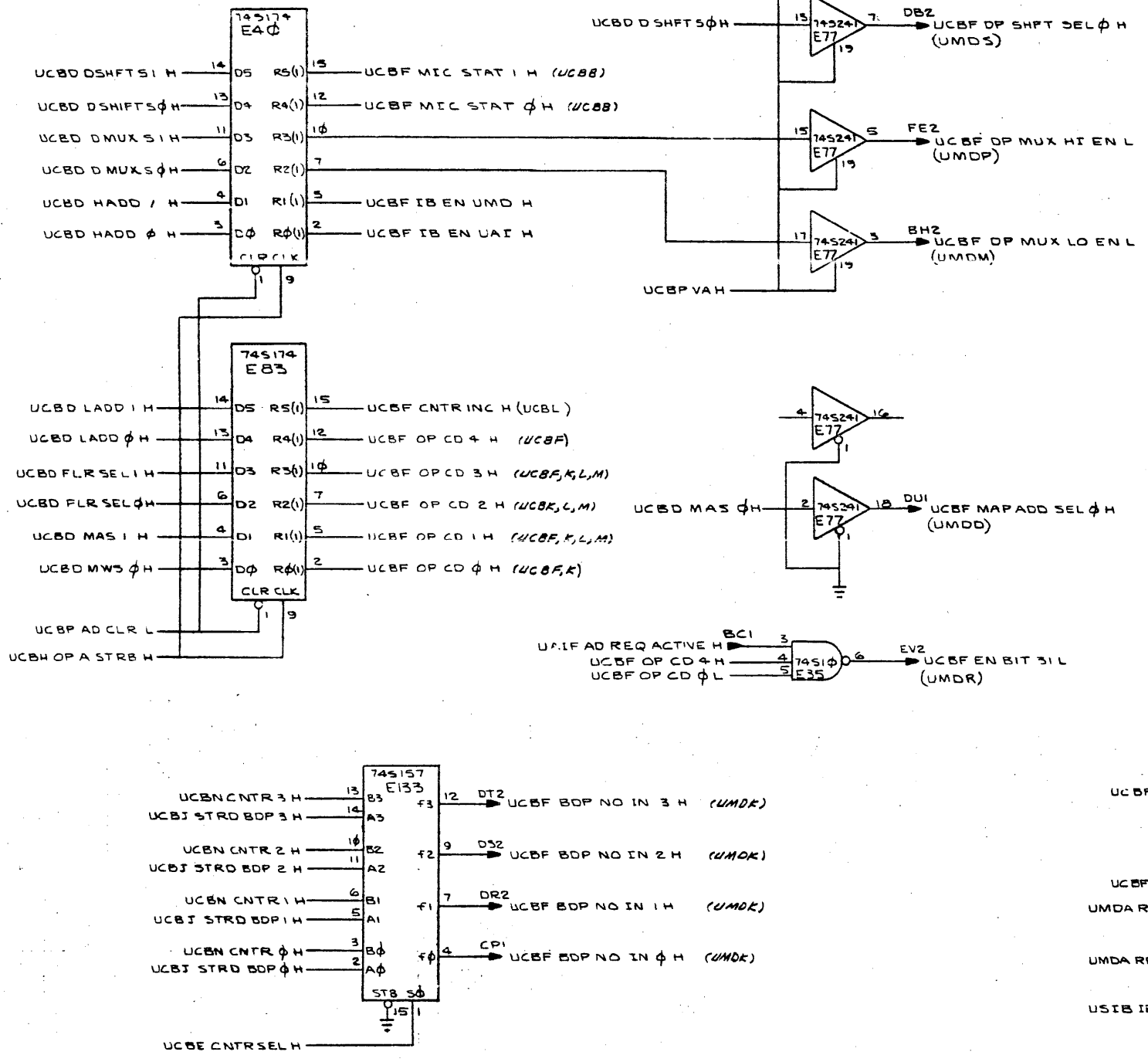
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS TYPE DRAWING FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION.

D CS M8271-0-1

8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A



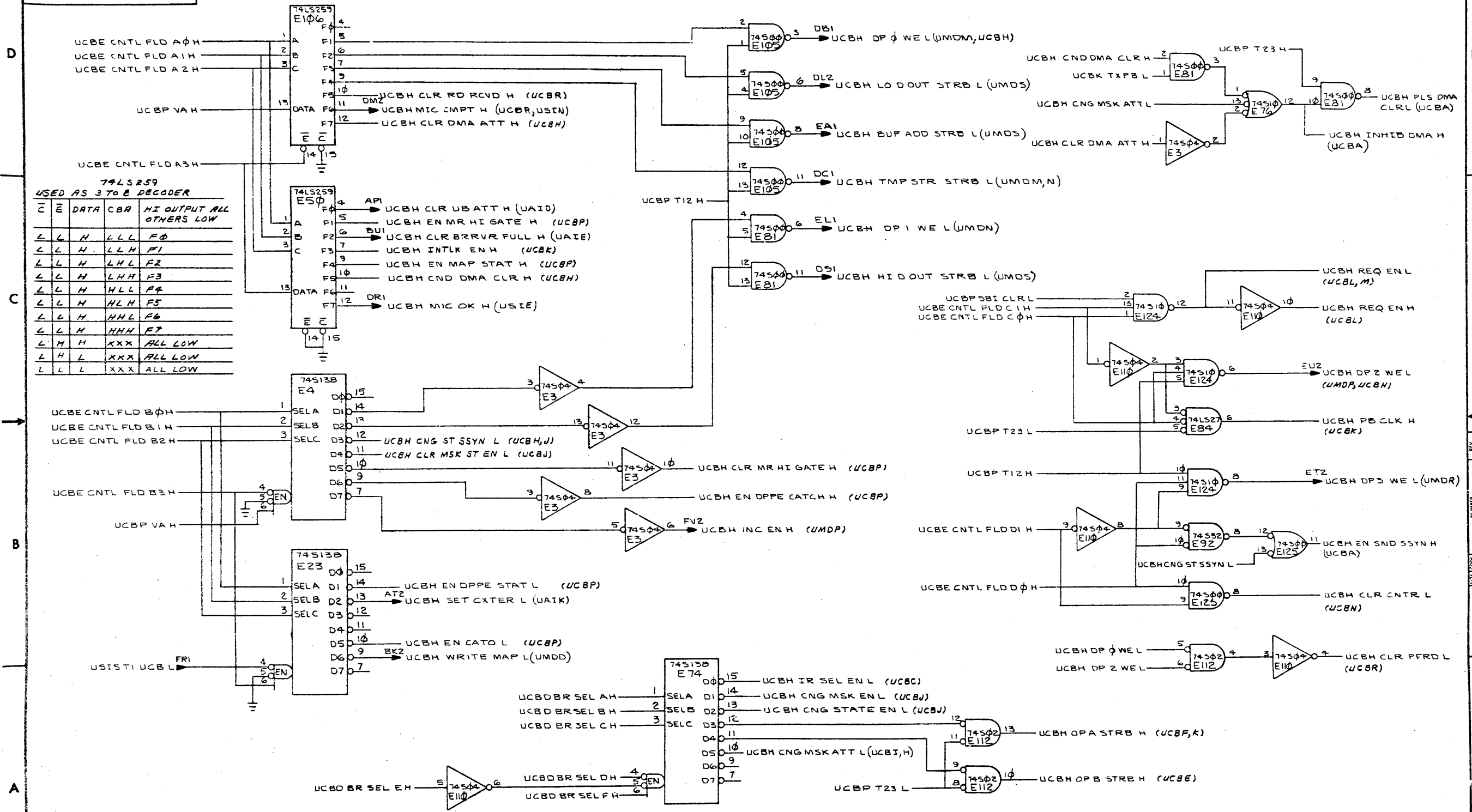
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		(UCBF)		SIZE CODE	NUMBER	REV.
UBA CONTROL BOARD		D CS M8271-0-1		DIST.	14 OF 21	D
SCALE		SHEET		DIST.		

8 7 6 5 4 3 2 1

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

1-0-1128W DCS 2



REVISIONS

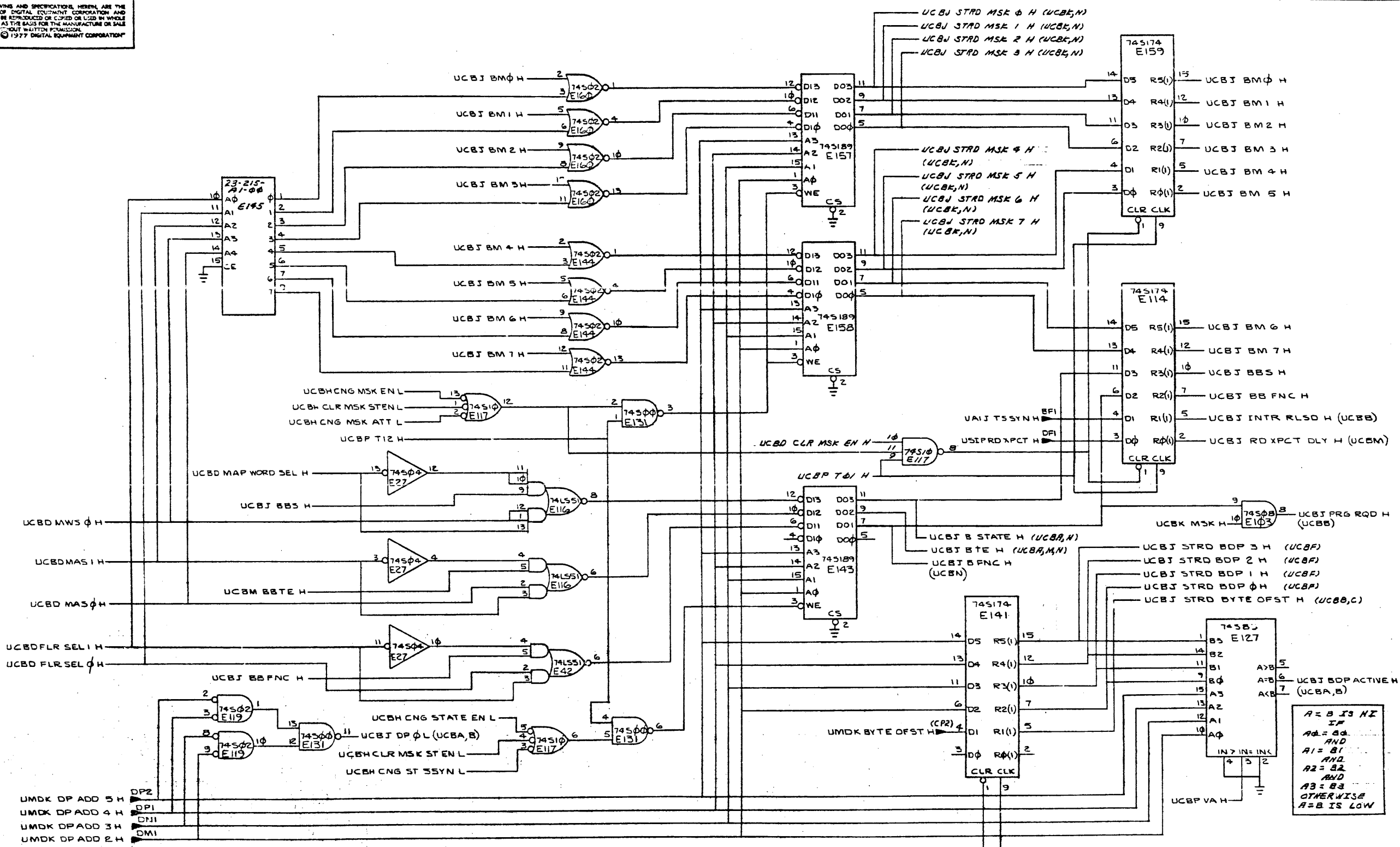
CHK	CHANGE NO.	REV.

(CNTL FLD DECODE) (SLOT 2)

TITLE	UBA CONTROL BOARD	SIZE CODE	DCS	NUMBER	M8271-0-1	REV.	D
SCALE		SHEET	12 OF 21	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

1-0-1/28W 500 2

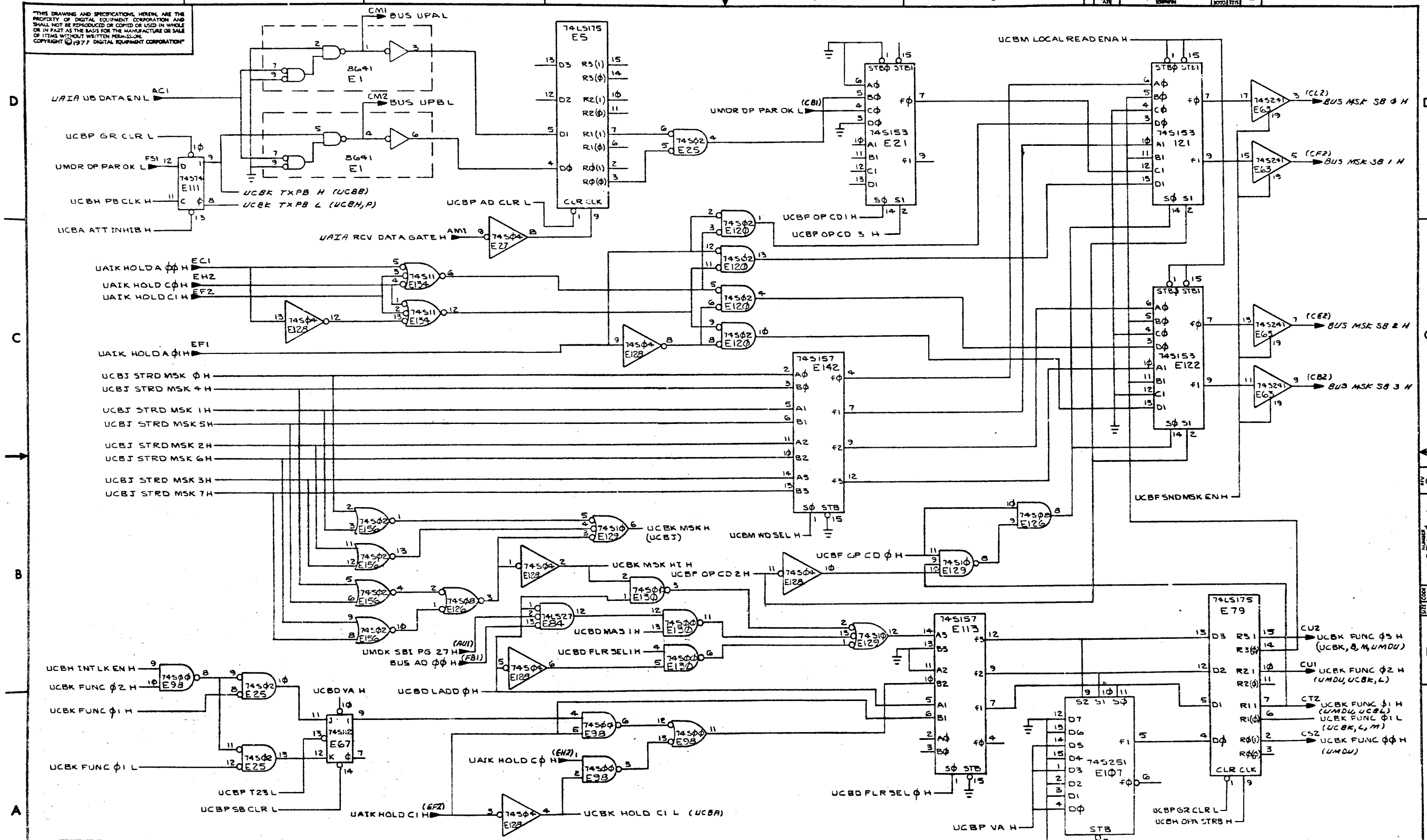


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		(BDP MASK AND STATE)		(SLOT 2)	
UBA CONTROL BOARD		SIZE CODE	NUMBER	REV.	
SCALE	SHEET 13 OF 21	DIST.	DCS M8271-0-1		

DCS M8271-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



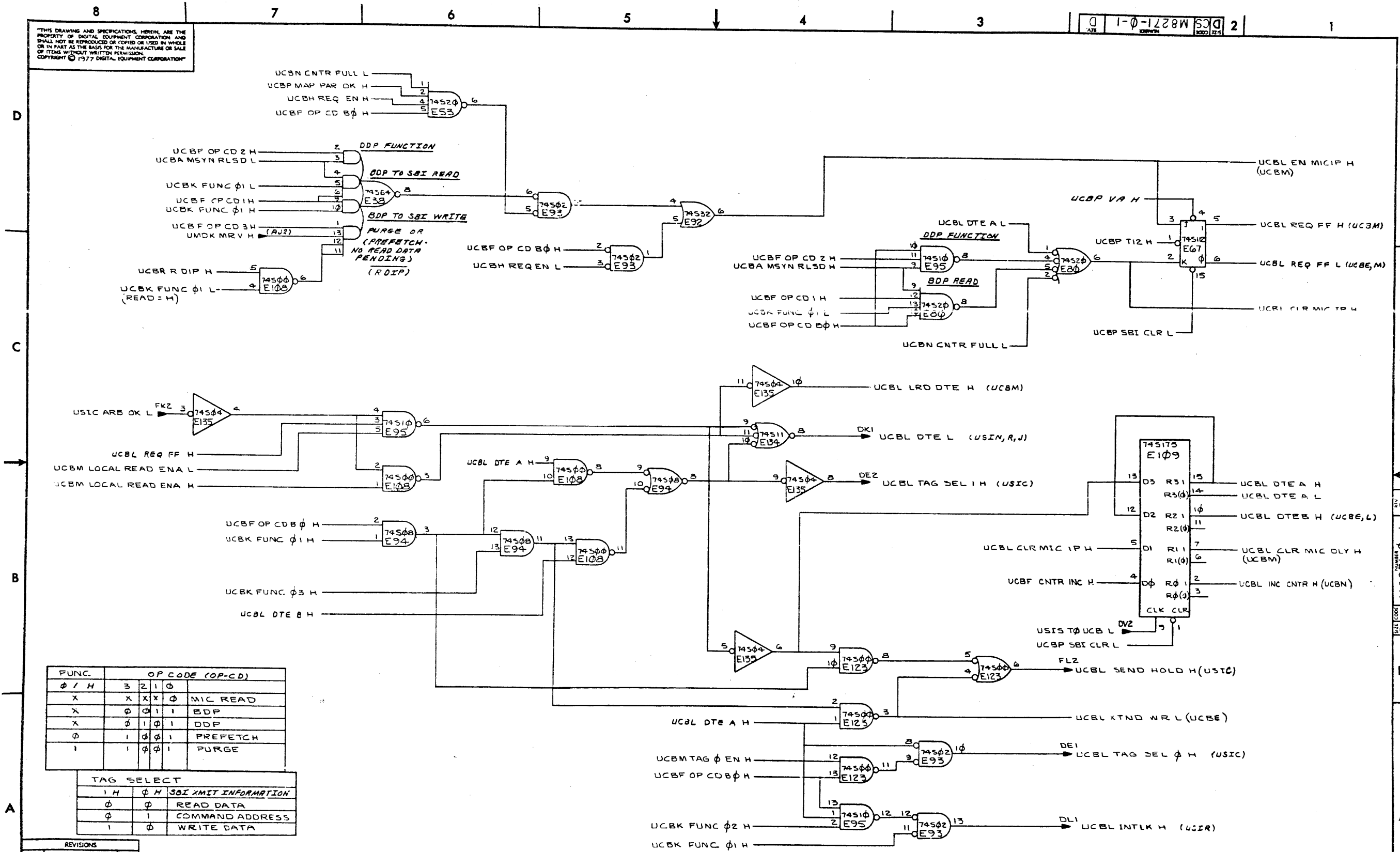
REVISIONS		
CHK	CHANGE NO.	REV.

(FUNCTION-MASK ENCODE) (SLOT 2)

TITLE	UBA CONTROL BOARD (UCBK)	SIZE/COOR	D CS M8271-0-1	NUMBER		REV.	D
SCALE		SHEET	14 OF 24	DIST.			

D CS M8271-0-1

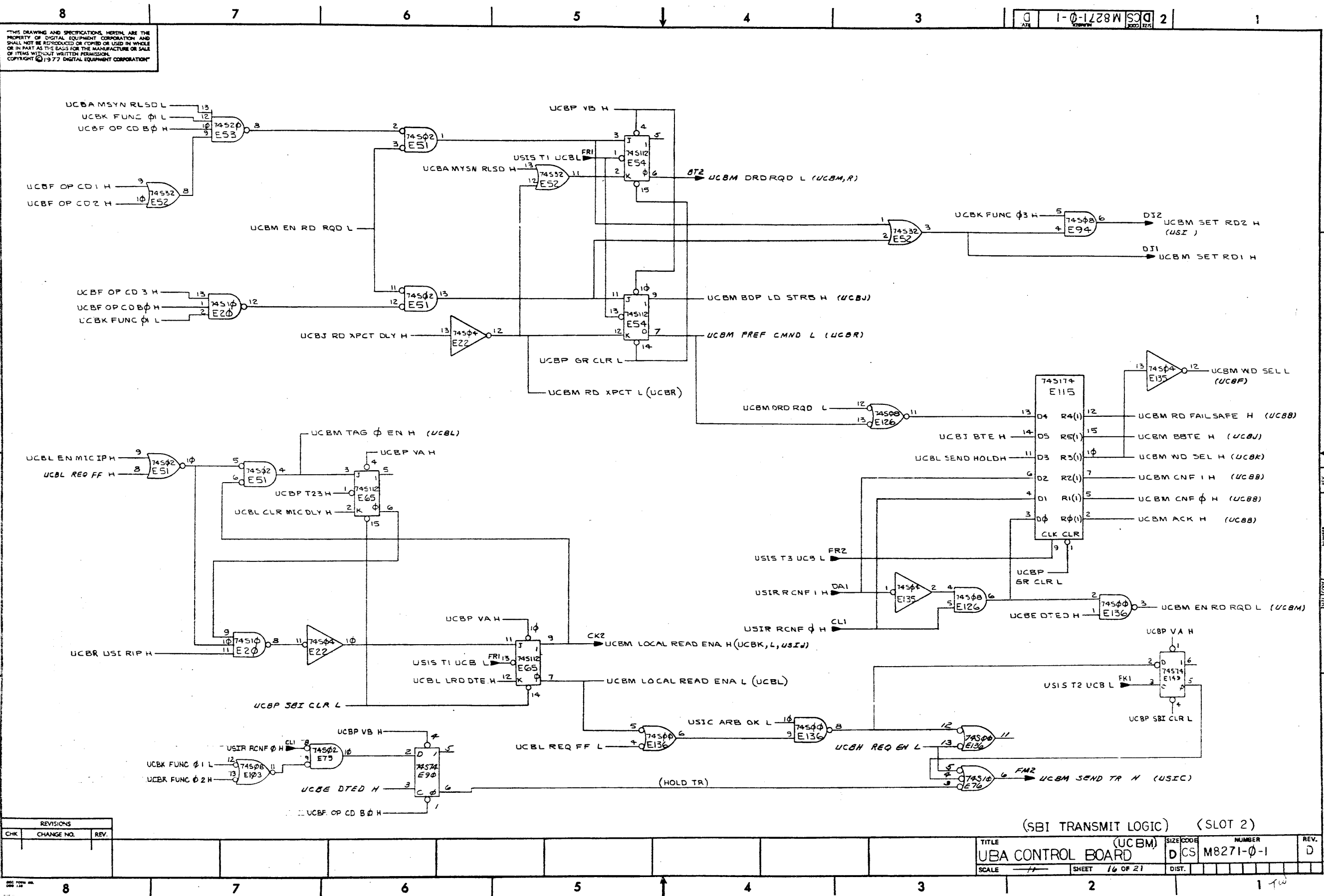
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



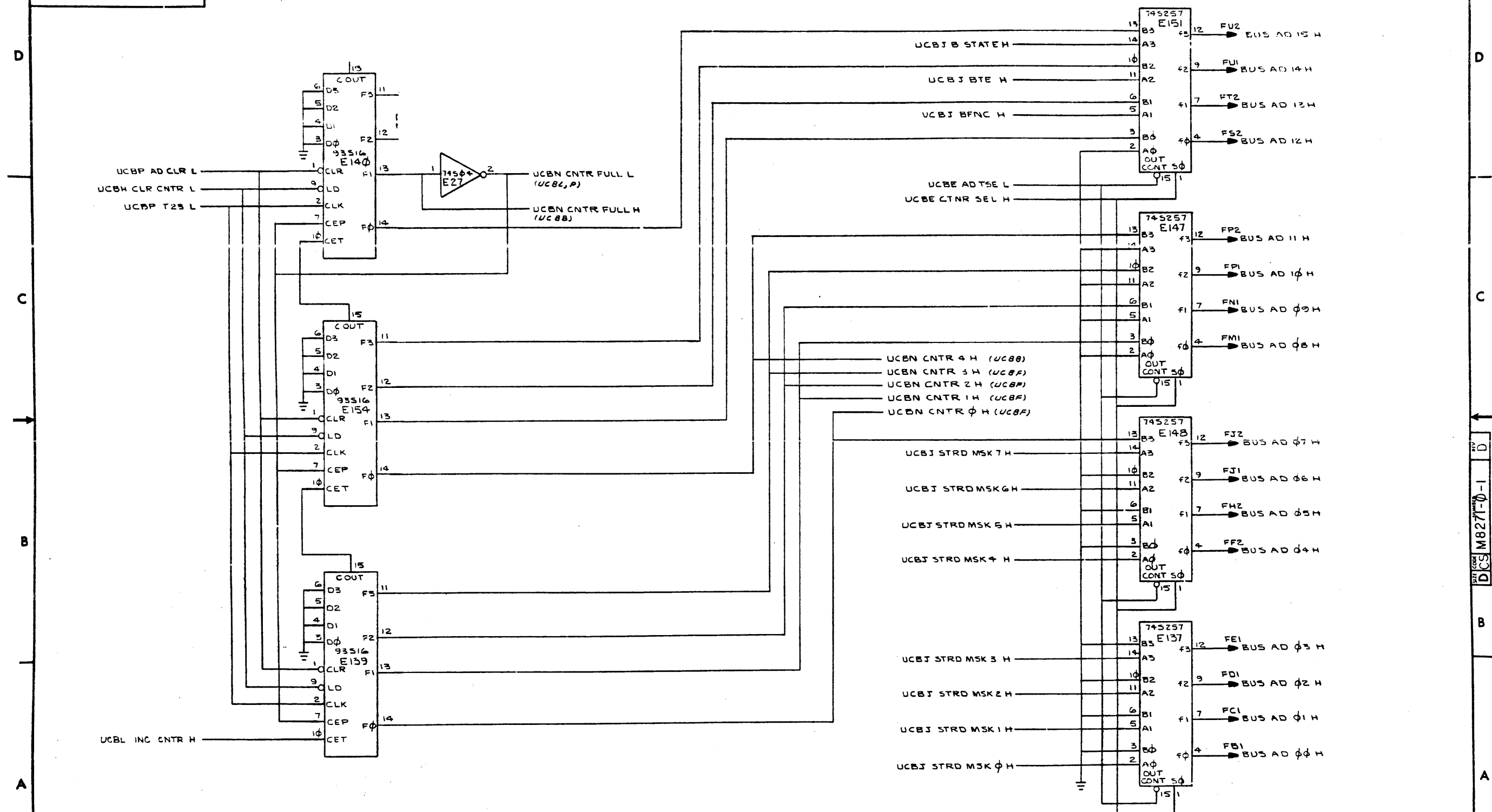
FUNC.	OP CODE (OP-CD)				
	φ / H	3	2	1	
X	X	X	X	φ	MIC READ
X	φ	φ	1	1	BDP
X	φ	1	φ	1	DDP
φ	1	φ	φ	1	PREFETCH
1	1	φ	φ	1	PURGE

TAG SELECT			
1	H	φ	SBI XMIT INFORMATION
φ	φ	φ	READ DATA
φ	φ	1	COMMAND ADDRESS
1	φ	φ	WRITE DATA

REVISIONS		
CHK	CHANGE NO.	REV.



THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



(INIT, TIMEOUT, CNTR, AD BUS) (SLOT 2)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(UCBN) SIZE CODE	NUMBER	REV.
UBA CONTROL BOARD	D CS	M8271-0-1	D
SCALE	SHEET 17 OF 21	DIST.	

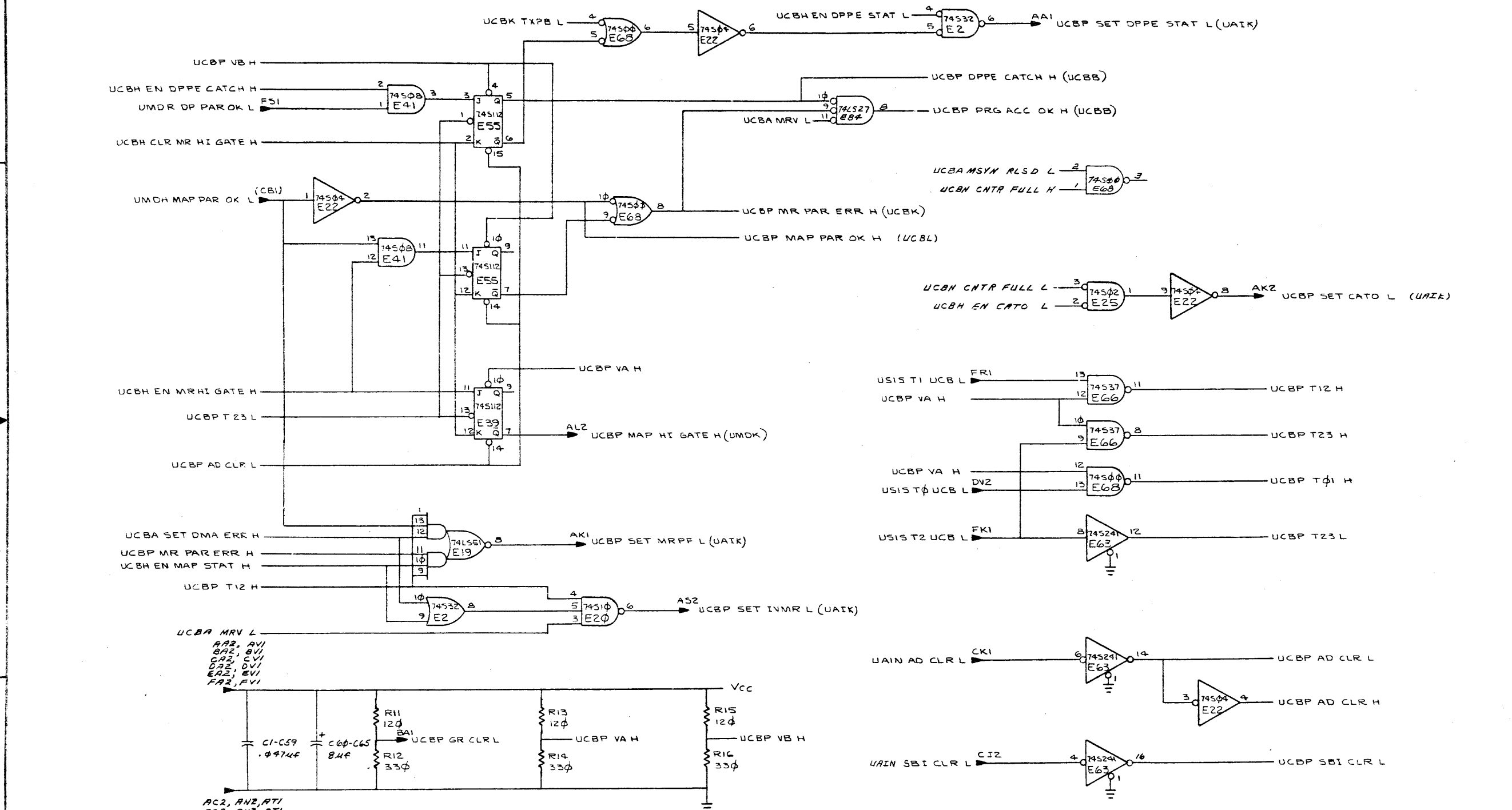
REV D
D CS M8271-0-1

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

J 1-0-1728W SCD 2

D
C
B
A

D
C
B
A



REVISIONS		
CHK	CHANGE NO.	REV.

- AA2, AV1
- BA2, BV1
- CA2, CV1
- DA2, DV1
- EA2, EV1
- FA2, FV1
- AC2, AN2, AT1
- BC2, BN2, BT1
- CC2, CN2, CT1
- DC2, DN2, DT1
- EC2, EN2, ET1
- FC2, FN2, FT1

(MAP & DP ERROR SET) (SLOT 2)

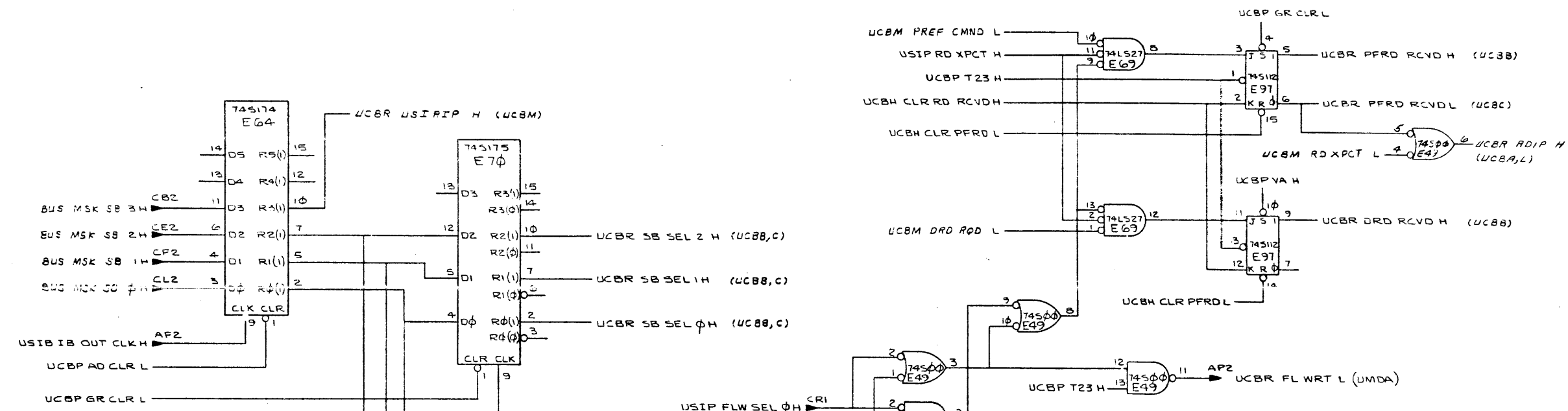
TITLE: UBA CONTROL BOARD (UCBP) SIZE: CODE: DCS NUMBER: M8271-0-1 REV: D

SCALE: --- SHEET: 1 OF 2 DIST: ---

DCS M8271-0-1

8 7 6 5 4 3 2 1 TW

"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"



SPARE GATES AND FLIP FLOPS

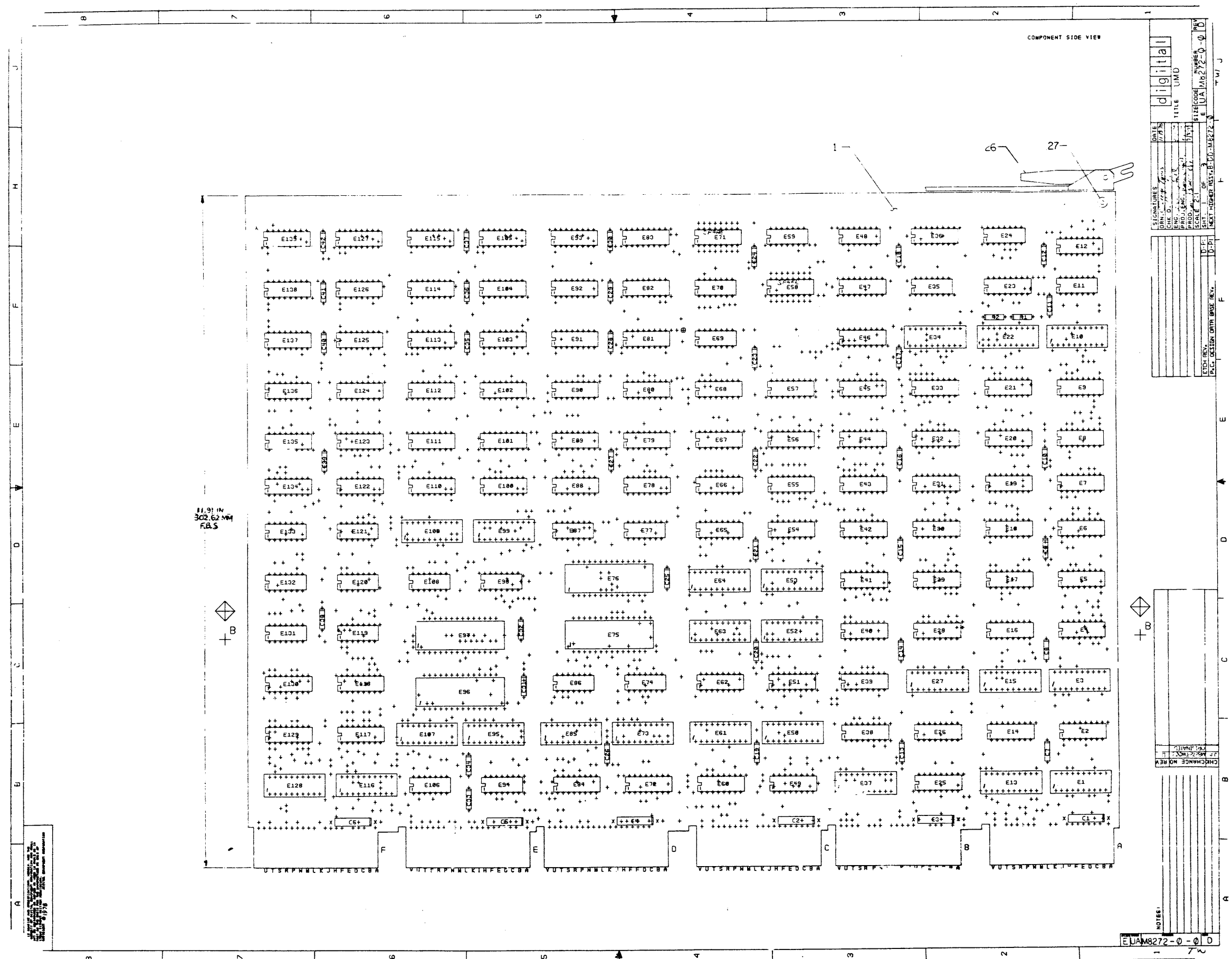
- 74LS00 E99 (1)
- E125 (2)
- E130 (1)
- E131 (1)
- 74LS02 E112 (1)
- 74LS04 E17 (1)
- E27 (1)
- E29 (2)
- E124 (3)
- E110 (1)
- 74LS32 E2 (2)
- E52 (1)
- 74LS51 E19 (1)
- E42 (1)
- 74LS08 E41 (1)
- 74LS10 E70 (1)
- 74LS37 E60 (2)
- 74LS112 E39 (1)
- E62 (1)

REVISIONS		
CHK	CHANGE NO.	REV.

(SB ATT-RECEIVE READ DATA) (SLOT 2)

TITLE	(UCBR)	SIZE CODE	NUMBER	REV.
UEA CONTROL BOARD	DCS	M8271-0-1	D	
SCALE	SHEET 19 OF 21	DIST.		

DCS M8271-0-1

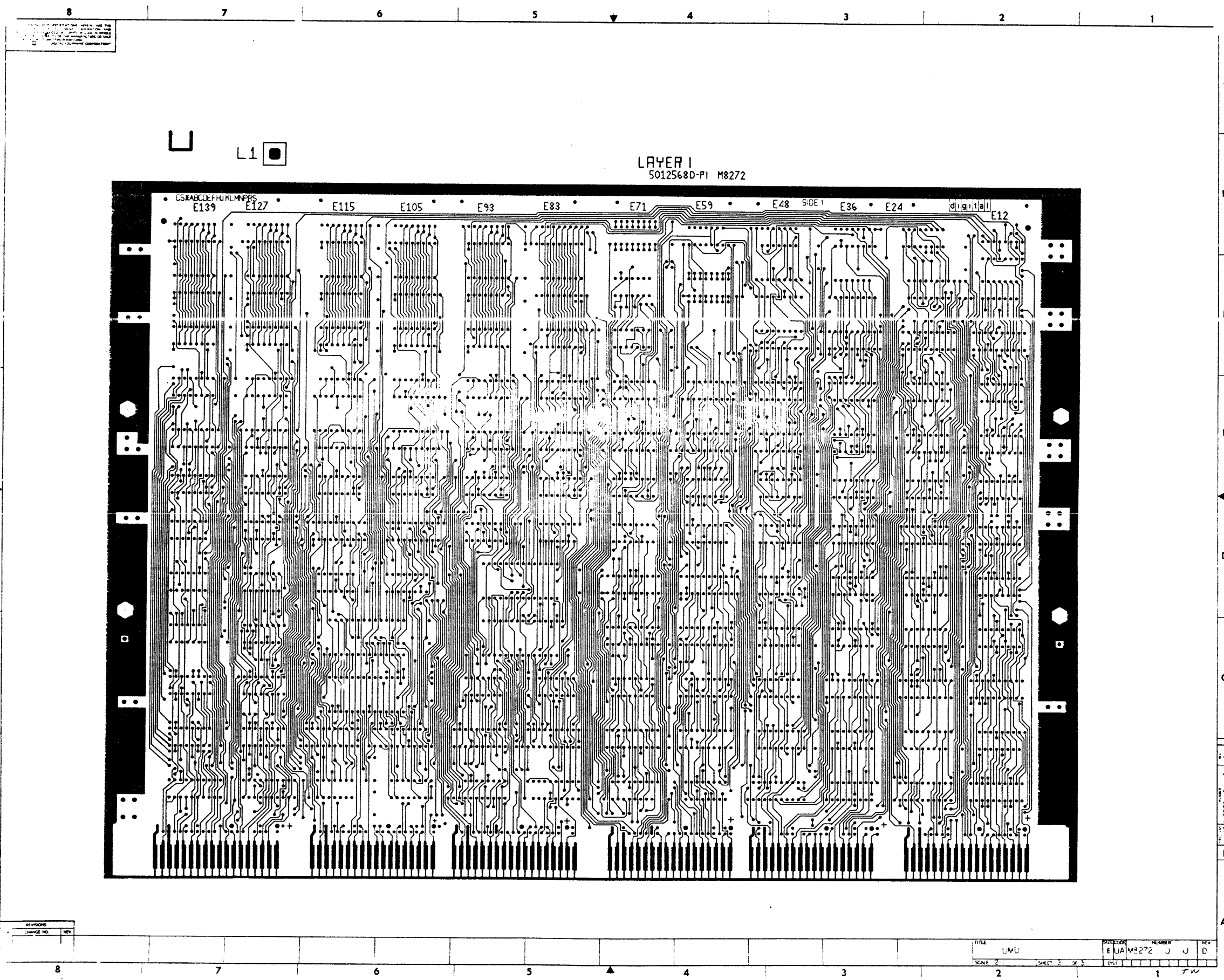


SIGNATURES	DATE	TITLE
DRW. BY: J. J. J.	7/7/76	digital
ENGR. BY: J. J. J.		UMD
PROD. BY: J. J. J.		
SCALE: 1:1		
NEXT HIGHER ASSY: E UAM8272-0-0		
PART NUMBER: E UAM8272-0-0		

REV. NO.	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

NOTES:
1. UAM8272-0-0 D

11.91 IN
302.62 MM
R.B.S.

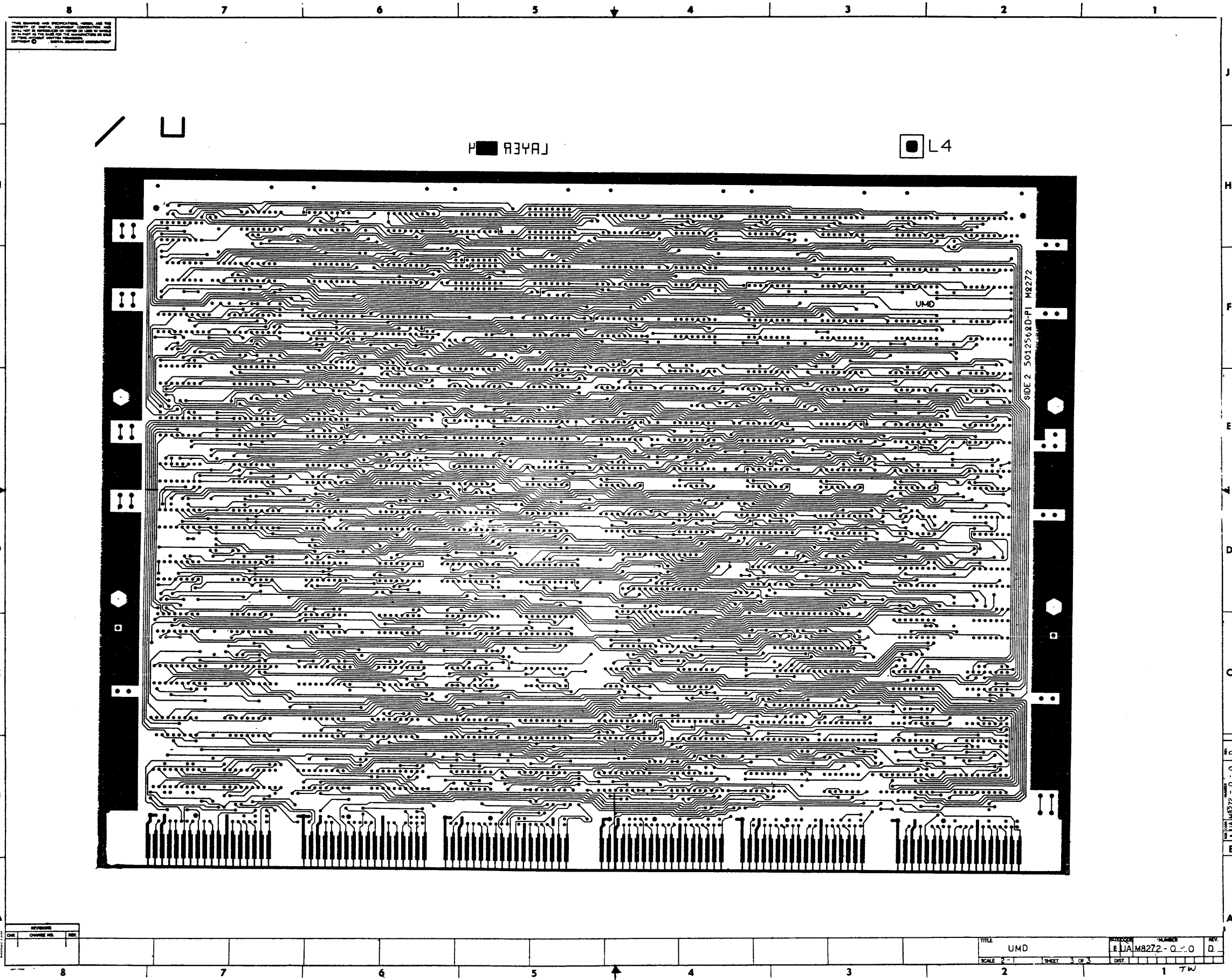


LAYER 1
50125680-PI M8272

CSABCDEFGHIJKLMNPS
E139 E127 E115 E105 E93 E83 E71 E59 E48 SIDE 1 E36 E24 digital E12

BY	DATE	DESCRIPTION

TITLE	UML	DATE		NUMBER	EUA M8272 J J D
SCALE	2:1	SHEET	2	OF	3



THIS DRAWING AND MODIFICATIONS HEREON ARE THE PROPERTY OF THE UNITED STATES GOVERNMENT AND ARE TO BE REPRODUCED AND TRANSMITTED IN ANY FORM AND BY ANY MEANS WITHOUT PERMISSION OF THE UNITED STATES GOVERNMENT.

REV	DESCRIPTION	DATE
1	INITIAL	

TITLE	UMD	DESIGNER	EUA	NUMBER	M8272-0-0	REV	D
SCALE	2	SHEET	3 OF 3	DIST.			

U.S. GOVERNMENT PRINTING OFFICE: 1967 O - 348-000
 GPO : 1967 O - 348-000

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	REFERENCE DESIGNATOR
1	D-MD-5012568-0-0	5012568-00	M8272	1	
2		1012084-01	8 MFD 25V G% 300 AL EL	6	C1-C6
3		1012784-00	.047 MFD 50V -20+80 CER	36	C7-C42
4		1300005-01	R NETWORK 13-1K RESISTORS 5% DIP	3	E77,E98,E120
5		1300295-00	330 1/4W 5% CC	1	R1
6		1301401-00	750 1/4W 5% CC	1	R2
7		1910532-00	74S00 NAND GATE-QUAD 2INS	4	E59,E69,E121,E132
8		1910534-00	74S04 INVERTER GATE-HEX 1I	1	E70
9		1910539-00	74S20 NAND GATE-DUAL 4INPU	1	E133
10		1910547-00	74S153 MUX 1 OF 4 (DUAL)	18	E56,E57,E67,E68,E72,E79,E80,E84, CONT F89,E90,E101,E102,E111,E112, CONT E123,E124,E135,E136
11		1910548-00	74S157 MUX 1 OF 2 (QUAD)	7	E12,E23,E31,E36,E43,E46,E47
12		1911573-00	74S280 PARITY GEN/CHKR,9BIT	12	E11,E24,E35,E48,E74,E86,E87,E94, CONT E106,E108,E119,E131
13		1911579-00	8641 TRANSCEIVER,BUS,QUA	4	E49,E51,E60,E62
14		1911641-00	SN 74S257 MUX,QUAD 2 TO 1	16	E2,E4,E8,E9,E14,E16,E20,E21,E25, CONT E26,E32,E33,E38,E39,E44,E45
15		1912647-00	LS257 MUX 1 OF 2 (QUAD)	4	E28,E40,E54,E65
16		1912656-00	LS670 REGISTER FILE,4X4,LO	8	E5,E6,E17,E18,E29,E30,E41,E42
17		1912693-00	25S10 SHIFTER,4BIT TRI-STA	8	E55,E66,E78,E88,E100,E110,E122, CONT E134
18		1910550-00	74S174 FF-D HEX	2	E7,E19
19		1913493-00	74S241 OCTAL BUFFER,TRI-STA	1	E22
20		1913662-00	RAM 1KX1 16 PIN TT	18	E81,E82,E83,E91,E92,E93, CONT E103-E105,F113-E115,E125-E127, CONT E137-E139
21		1913663-00	93419DC RAM 64X9 28PIN TT	4	E75,E76,E96,E97
22		1913670-00	74S373 LATCH 8BIT TRASP TR	6	E1,E10,E15,E34,E53,F64
23		1913671-00	74S374 FF-D OCTAL TRISTATE	12	E3,E13,E27,E37,E50,E52,E61,E63,

REVISION HISTORY			BASIC PART NO: M8272		
ENG	ECO NUMBER	REV	SECTION A OF A	DRN: W. HAVENER	DATE: 14-MAR-79
---	INITIAL	B	SECTION, VARIATION INDEX	CHK'D: D. HEALEY	DATE: 14-MAR-79
P,G	00002	D	(A) 00		
PG	1W002	D	(B)	DES. ENG: B. HALL	DATE: 14-MAR-79
			(C)	RESP. ENG.: B. HALL	DATE: 14-MAR-79
			(D)		
			(E)		
			(F)		
			(H)		
			(J)		
			(K)	MFG. ENG.: M. TERELLA	DATE: 14-MAR-79
			(L)		
			(M)	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:
			(N)	D-UA-M8272-0-0	FILE NAME: M8272.PLS

"THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1979, DIGITAL EQUIPMENT CORPORATION"

TW

AUTOMATED BY PRTLST,3J(25)

P A R T S L I S T

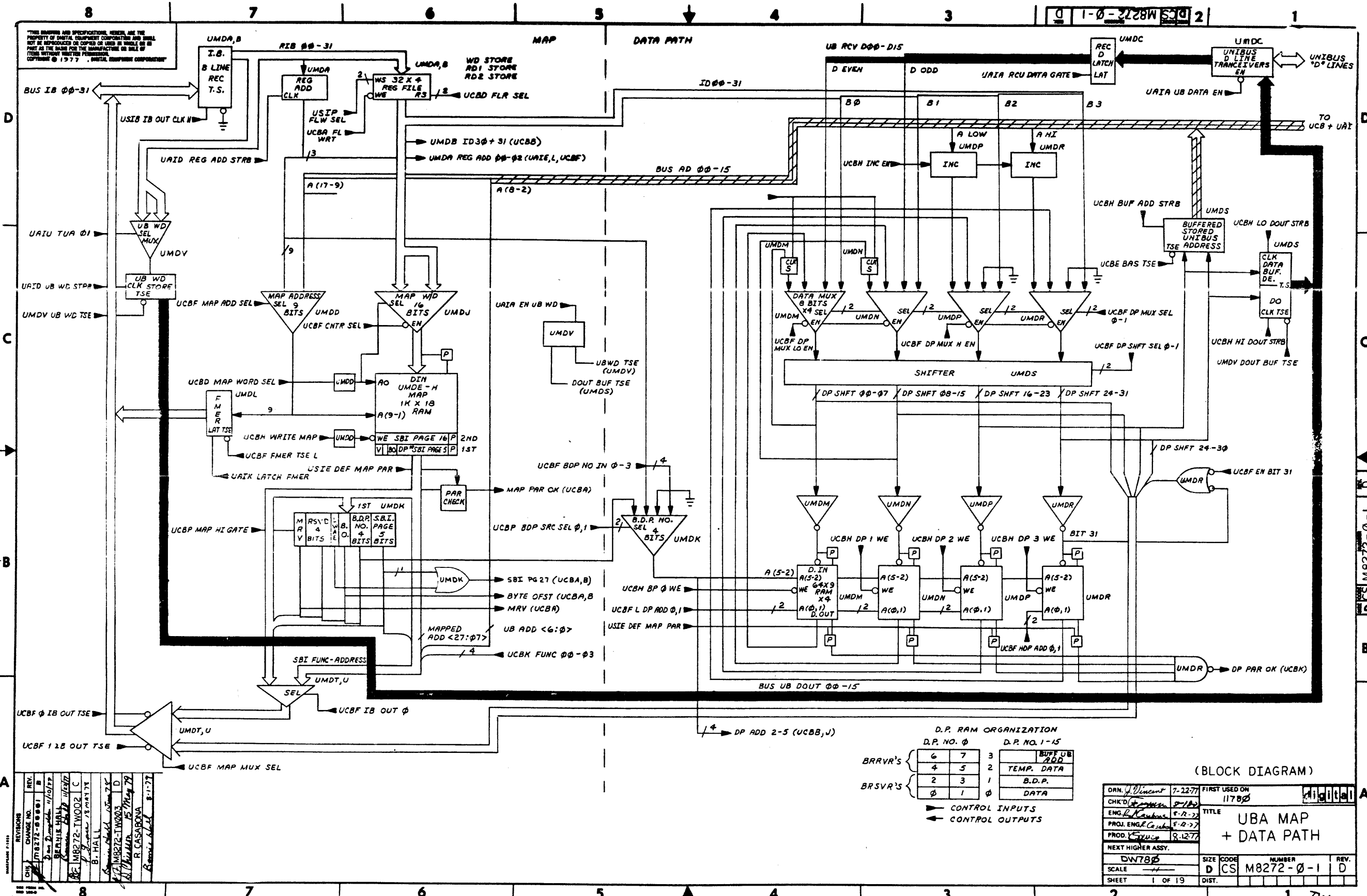
SHEET A2 OF A2

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
24	24	1913462-00	74S240 OCTAL BUFFER,INVERTI	4	CONT E99,E109,E116,E128
25	25	1912865-00	LS283 ADDER-4BIT BINARY FU	4	E73,E85,E95,E107
26	26	1210711-02	HANDLE,MODULE,HEX	1	E117,E118,E129,E130
27	27	9000024-01	EYELET, ROLLED FLANGE, .121 OD X	12	
28	28	9105740-55	*** THIS ITEM IS NOT USED ***	-	

Ø NOTE: SPARE IC LOCATIONS ARE E58,E71

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							U. M. D.				M8272-0-DAP	D
									K	PL		

TW



THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION

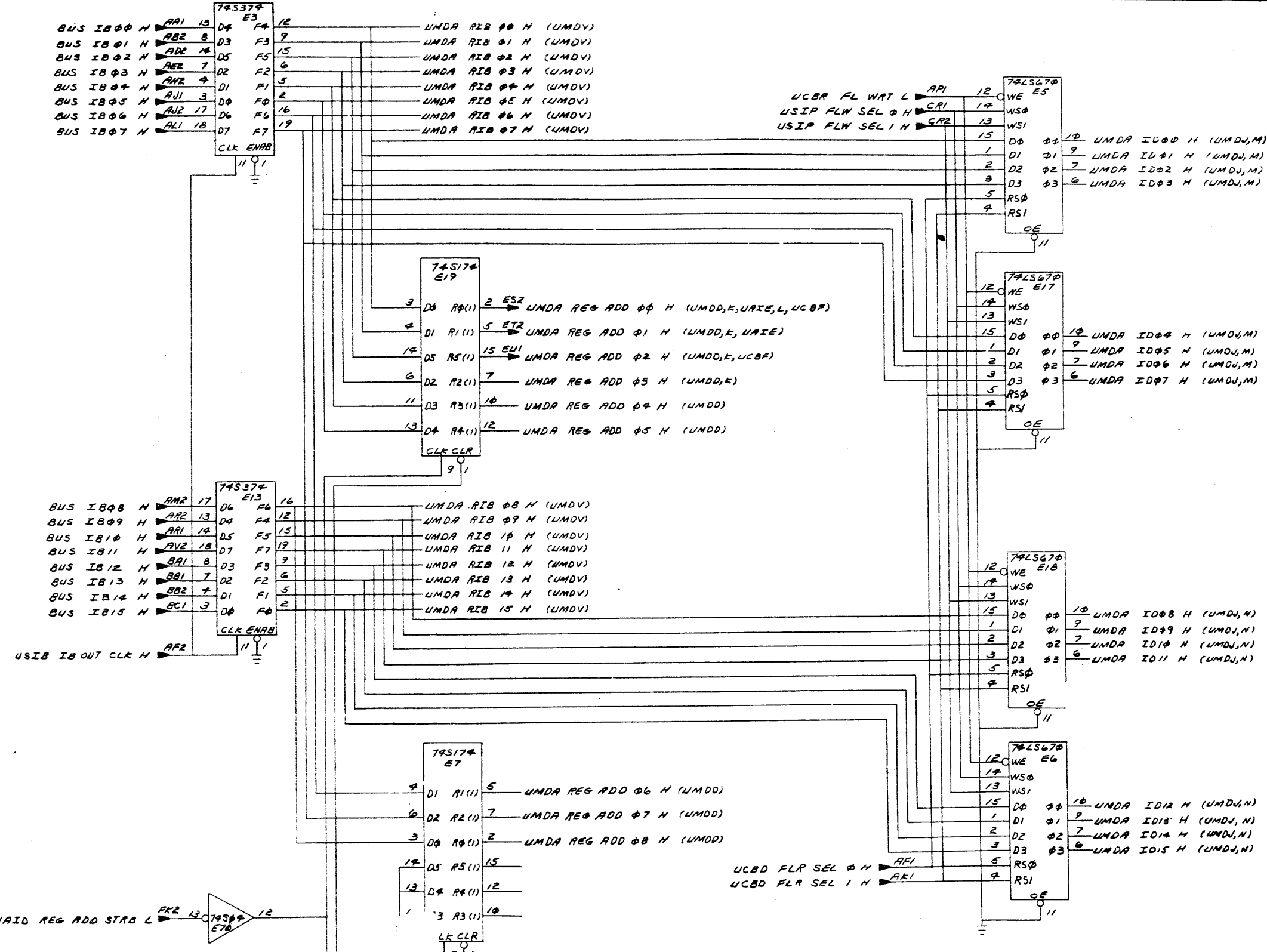
REVISONS

REV.	NO.	DATE	BY	CHKD.
1	1	11/01/77	B. HALL	
2	2	11/01/77	B. HALL	
3	3	11/01/77	B. HALL	
4	4	11/01/77	B. HALL	
5	5	11/01/77	B. HALL	
6	6	11/01/77	B. HALL	
7	7	11/01/77	B. HALL	
8	8	11/01/77	B. HALL	

(BLOCK DIAGRAM)

ORIN. J. Vincent	7-2277	FIRST USED ON	11780	Digital
CHKD. J. Vincent	8-180	TITLE	UBA MAP + DATA PATH	
ENG. R. Casanova	8-2-77	PROJ. ENG. R. Casanova		
PROD. J. Vincent	8-12-77	NEXT HIGHER ASSY.		
SCALE	DW780	SIZE CODE	D	NUMBER
SHEET	1 OF 19	DIST.		REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	DATE

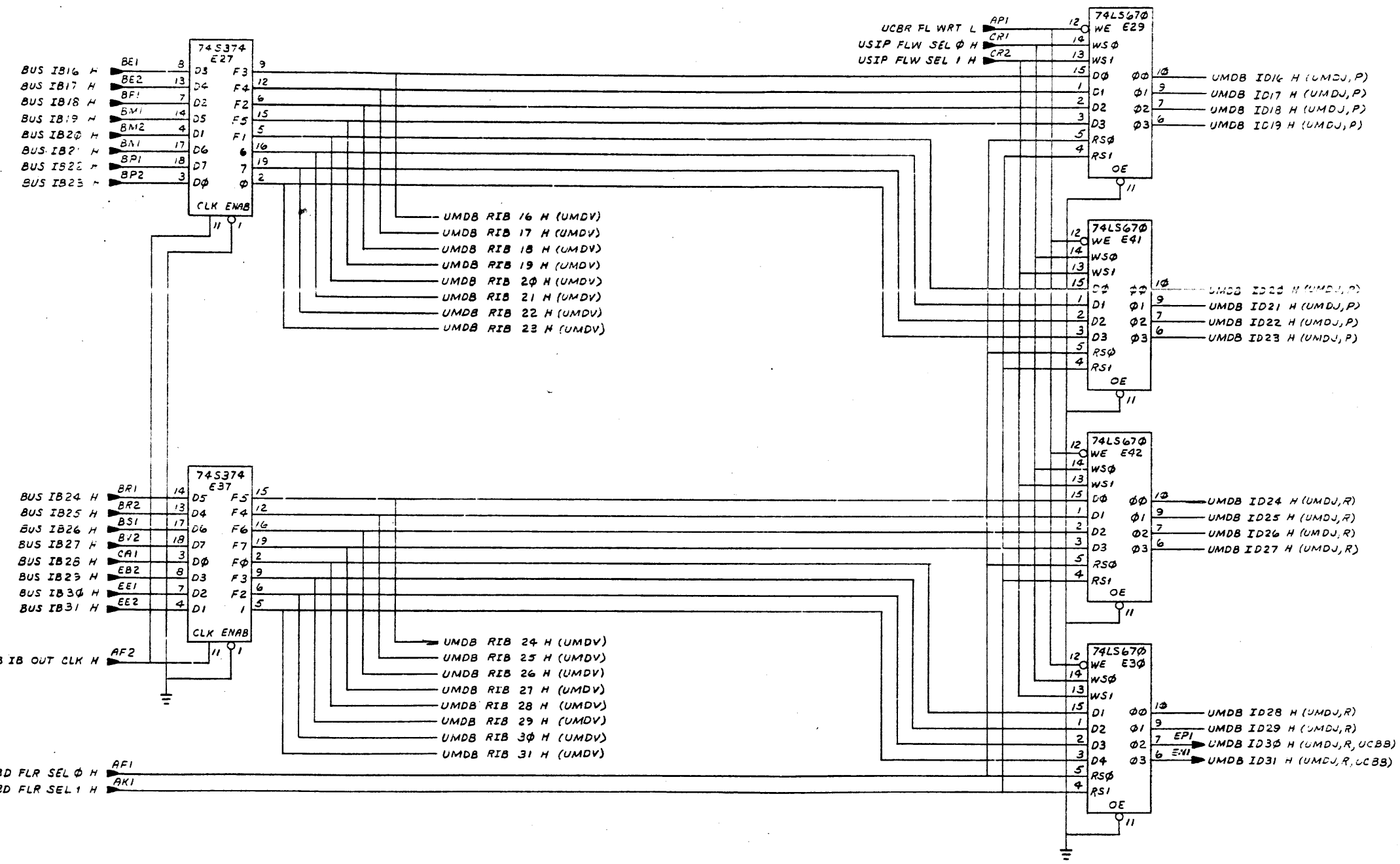
(INT BUS RCV 00-15) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDA)	SIZE CODE	D CS M8272-0-1	NUMBER	2	REV.	D
SCALE	→	SHEET	2 OF 19	DIST.			

DCS M8272-0-1 D

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1971 DIGITAL EQUIPMENT CORPORATION

DCS M8272-0-1

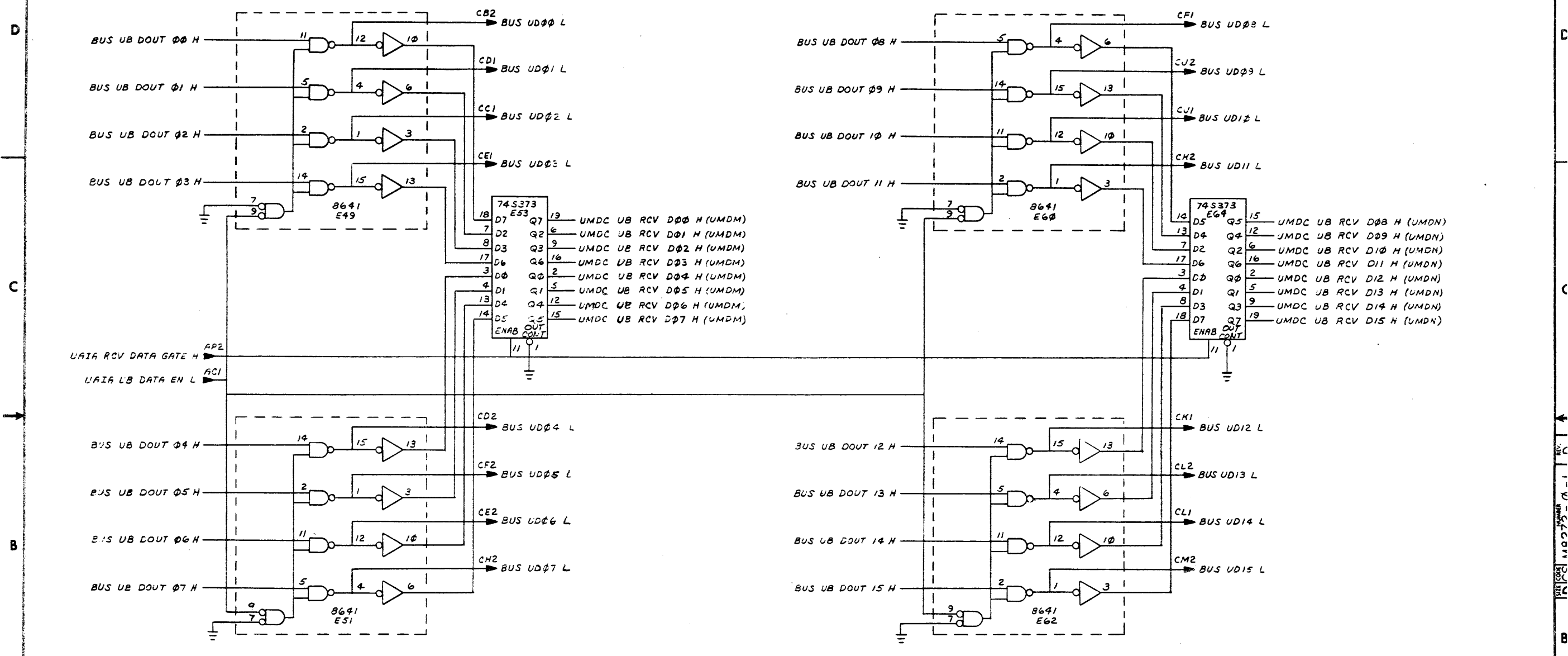


REVISIONS		
CHK	CHANGE NO.	REV.

(INT BUS RCV 16-31) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDB)	SIZE CODE	DCS	NUMBER	M8272-0-1	REV.	1
SCALE	1/1	SHEET	3 OF 19	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



- 74S373 E53
- 18 D7 Q7 19 UMDC UB RCV D00 H (UMDM)
 - 7 D2 Q2 6 UMDC UB RCV D01 H (UMDM)
 - 8 D3 Q3 9 UMDC UB RCV D02 H (UMDM)
 - 17 D6 Q6 16 UMDC UB RCV D03 H (UMDM)
 - 3 D0 Q0 2 UMDC UB RCV D04 H (UMDM)
 - 4 D1 Q1 5 UMDC UB RCV D05 H (UMDM)
 - 13 D4 Q4 12 UMDC UB RCV D06 H (UMDM)
 - 14 D5 Q5 15 UMDC UB RCV D07 H (UMDM)
- ENAB OUT CONT 11 1

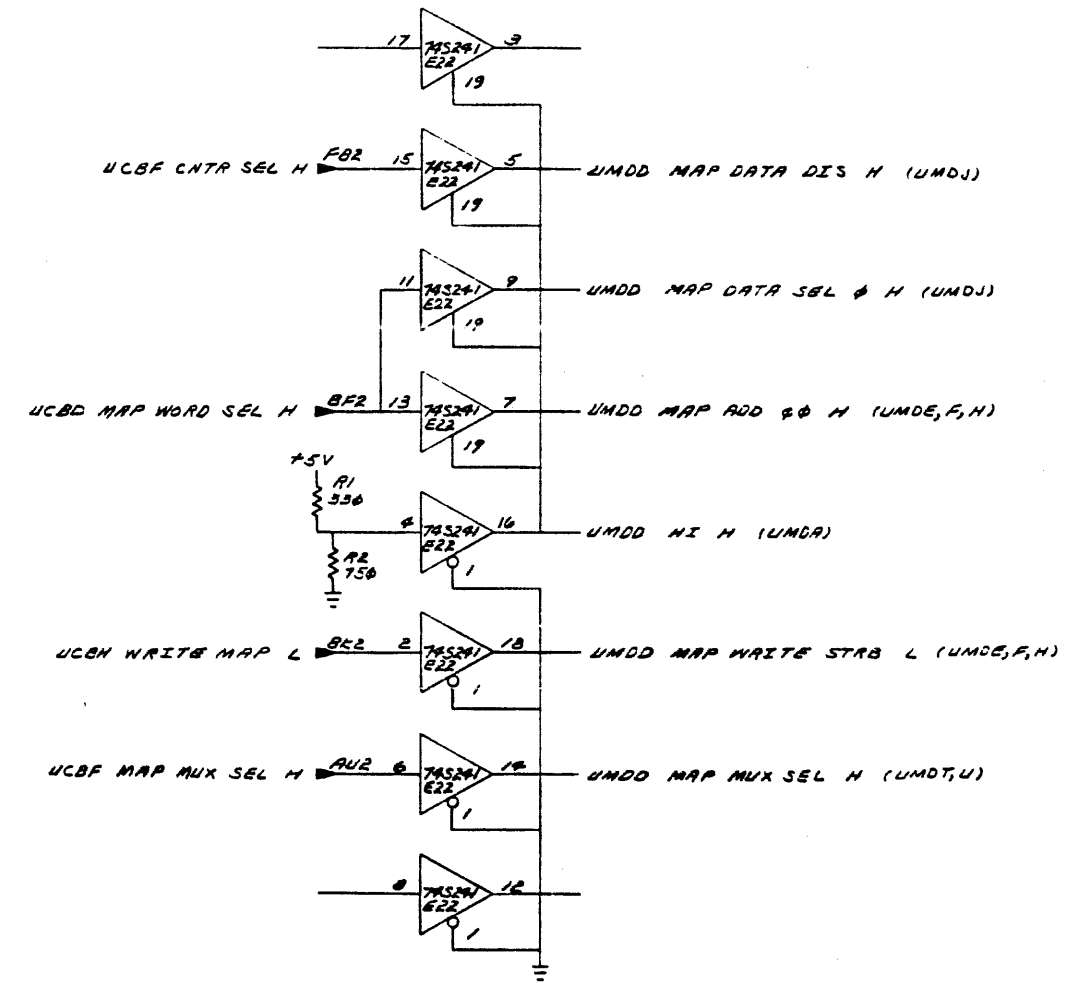
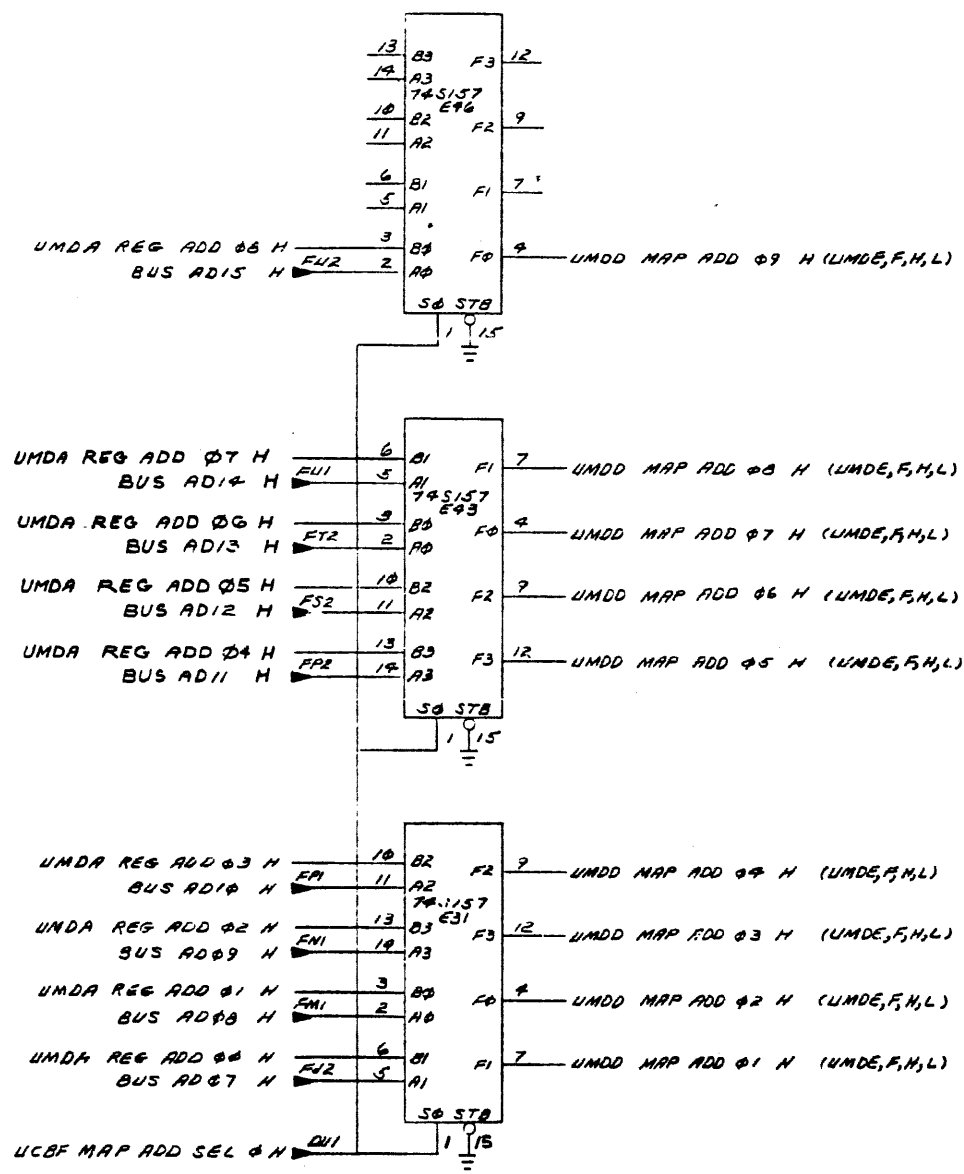
- 74S373 E60
- 14 D5 Q5 15 UMDC UB RCV D08 H (UMDN)
 - 13 D4 Q4 12 UMDC UB RCV D09 H (UMDN)
 - 7 D2 Q2 6 UMDC UB RCV D10 H (UMDN)
 - 17 D6 Q6 16 UMDC UB RCV D11 H (UMDN)
 - 3 D0 Q0 2 UMDC UB RCV D12 H (UMDN)
 - 4 D1 Q1 5 UMDC UB RCV D13 H (UMDN)
 - 8 D3 Q3 9 UMDC UB RCV D14 H (UMDN)
 - 18 D7 Q7 19 UMDC UB RCV D15 H (UMDN)
- ENAB OUT CONT 11 1

REVISIONS		
CHK	CHANGE NO.	REV.

(UB DATA XCVRS) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDC)	SIZE CODE	DCS	NUMBER	M8272-0-1	REV	D
SCALE	1/1	SHEET	4 OF 19	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

(MAP ADDRESS MUX)

(SLOT 3)

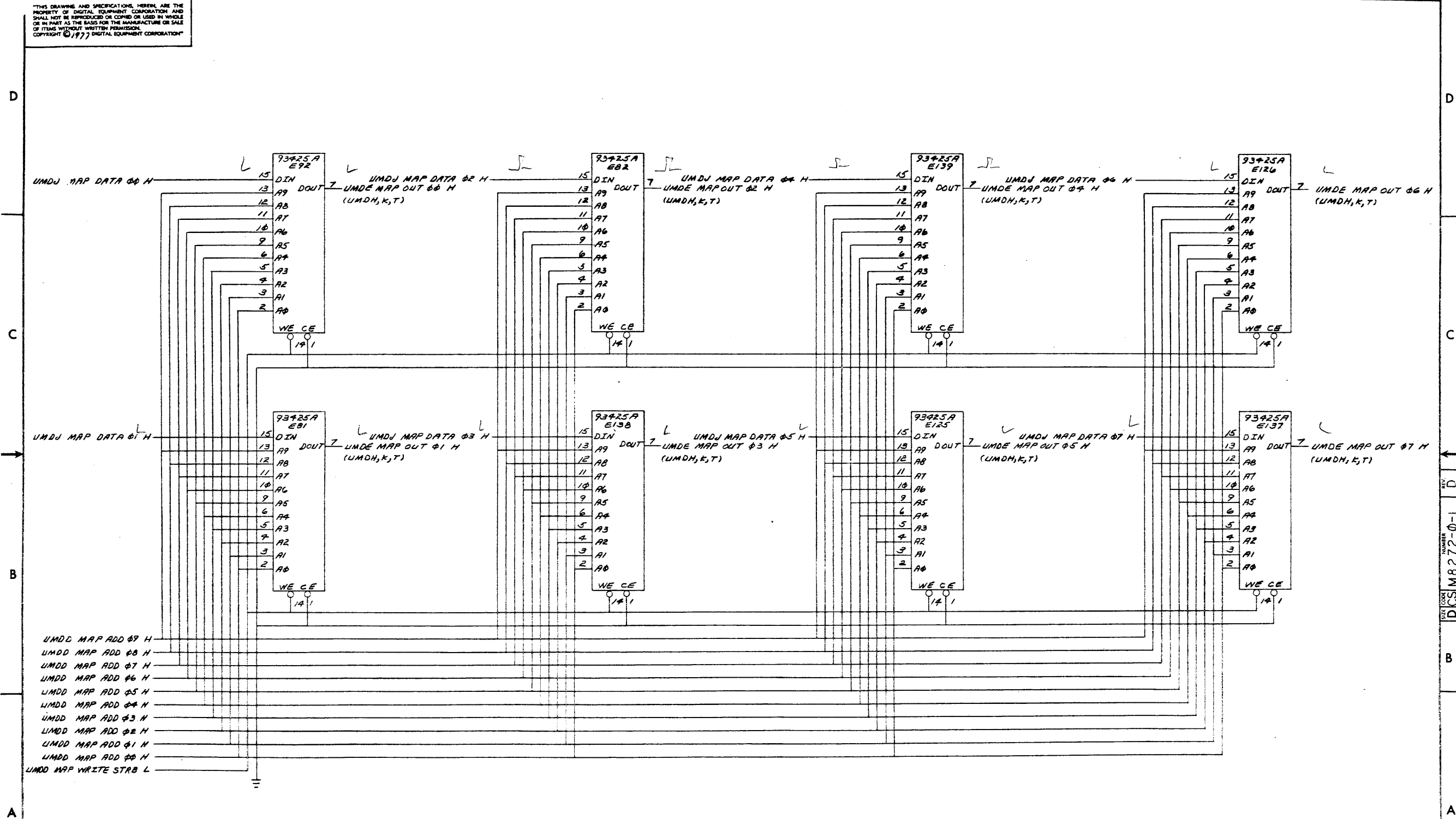
TITLE	UBA MAP & DATA PATH (UMDD)	SIZE/CODE	DCS	NUMBER	M2272-0-1	REV.	0
SCALE		SHEET	5 OF 19	DIST.			

DCS M2272-0-1

1 TW

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

D 1-0-2228W 2

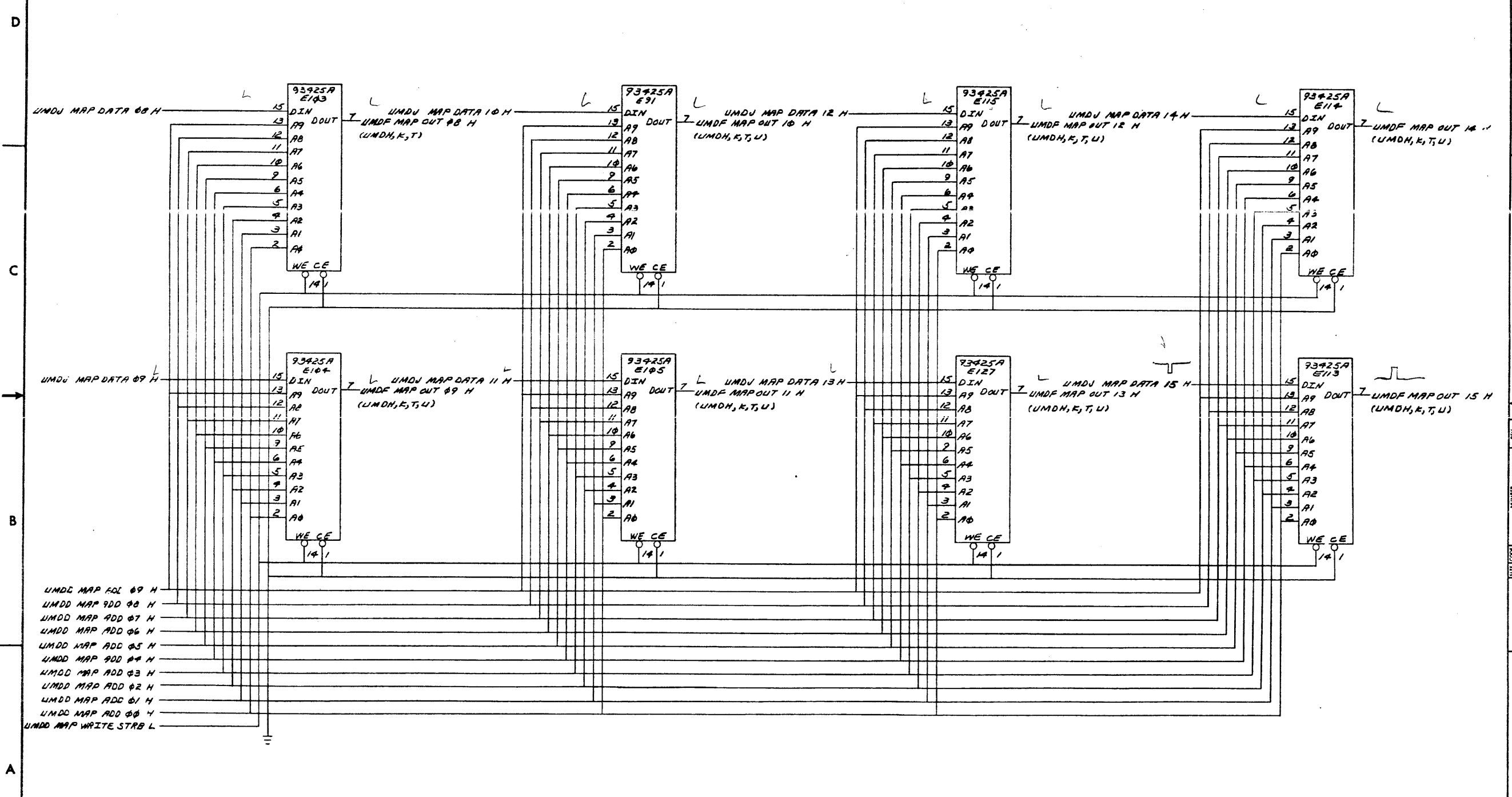


REVISIONS		
CHK	CHANGE NO.	REV.

(MAP 00-07) (SLOT 3)
 TITLE UBA MAP & DATA PATH (UMDE) DCS M8272-0-1
 SCALE SHEET 6 OF 19 DIST. NUMBER REV. D
 1 TW

DCS M8272-0-1 D

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



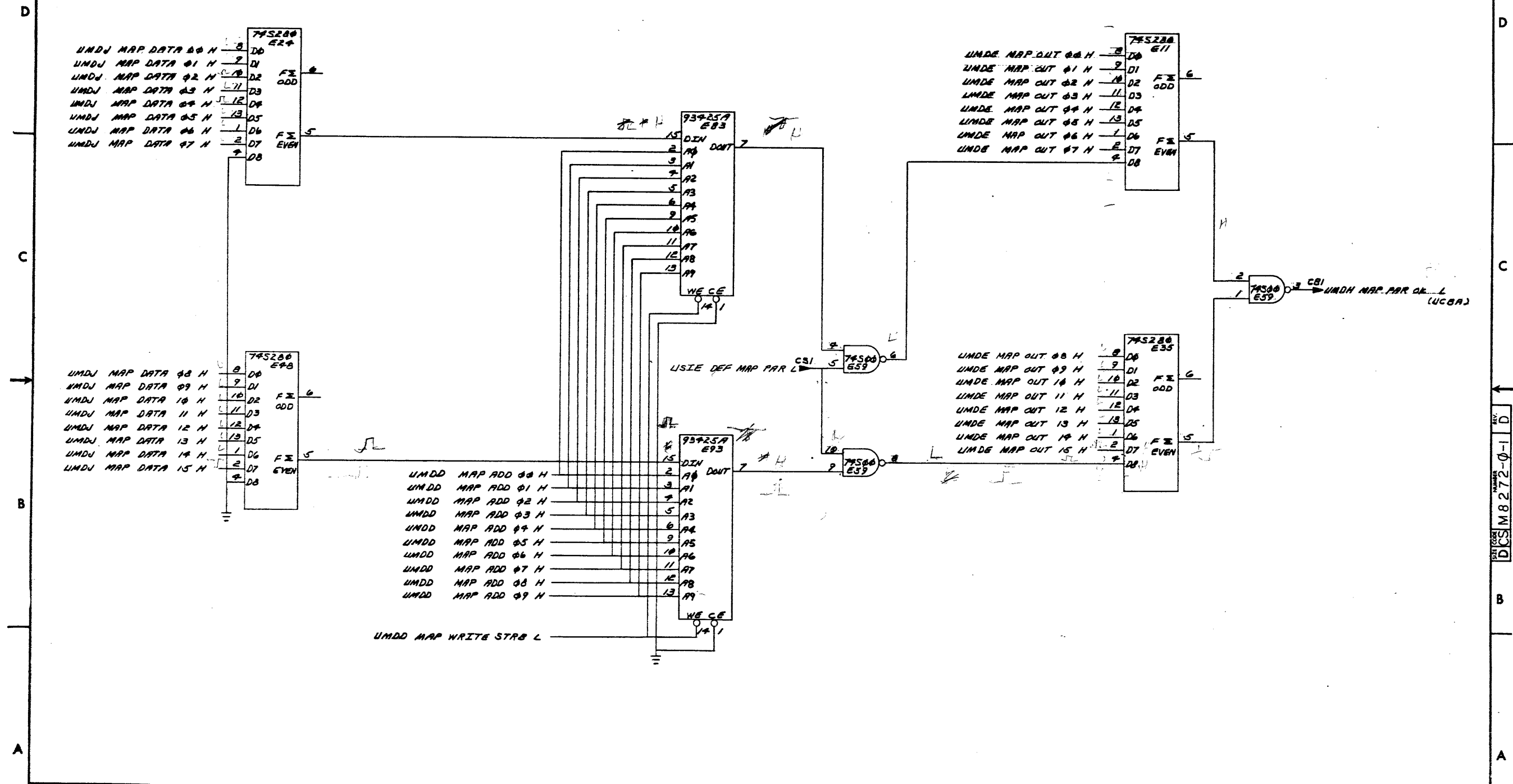
REVISIONS		
CHK	CHANGE NO.	REV.

(MAP 08-15) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDF)	SIZE/SCALE	DIST.	NUMBER	M 8272-0-1	REV	D
SHEET		7 OF 9					

DCS M8272-0-1 D
 NUMBER
 REV

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



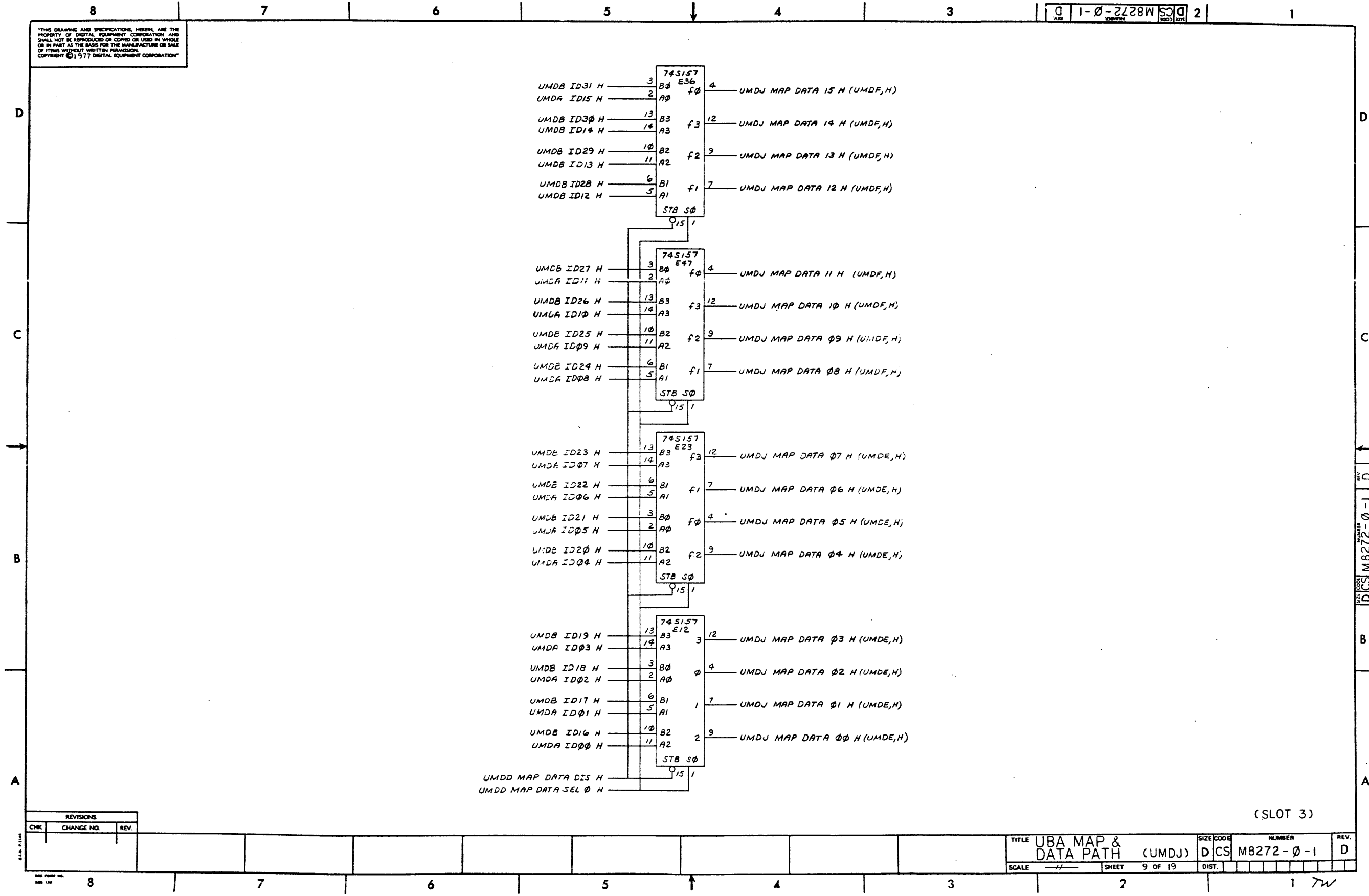
REVISIONS		
CHK	CHANGE NO	REV.

(MAP PARITY) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDH)	SIZE CODE	DCS	NUMBER	M 8 2 7 2 - 0 - 1	REV.	D
SCALE	←→	SHEET	8 OF 9	DET.			

DCS M 8 2 7 2 - 0 - 1 D

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



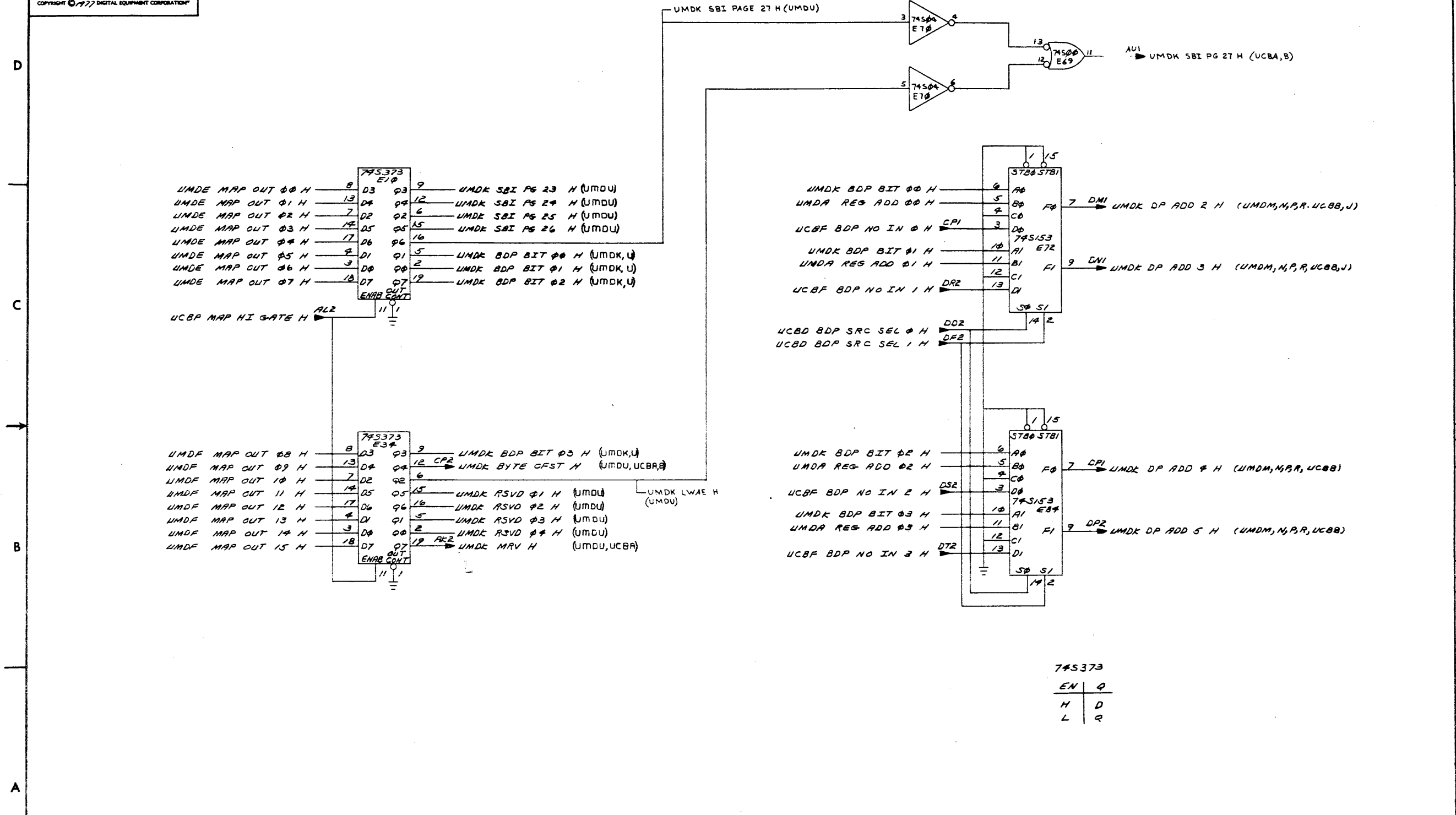
REVISIONS		
CHK	CHANGE NO.	REV.

(SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDJ)	SIZE CODE	D	CS	NUMBER	M8272-0-1	REV.	D
SCALE	1/1	SHEET	9	OF 19	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

DCS M8272-0-1 2



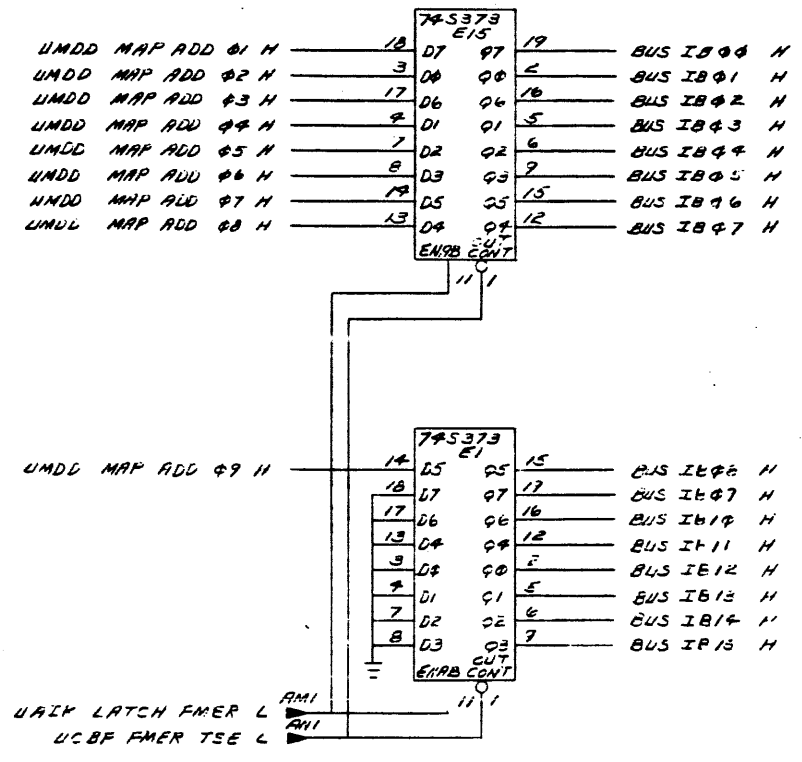
REVISIONS		
CHK	CHANGE NO.	REV.

(MAP REGISTER, BDP MUX + LNG WD MUX) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDK)	SIZE CODE	DCS	NUMBER	M8272-0-1	REV.	1
SCALE	←→	SHEET	10 OF 19	DIST.			

DCS M8272-0-1 D

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



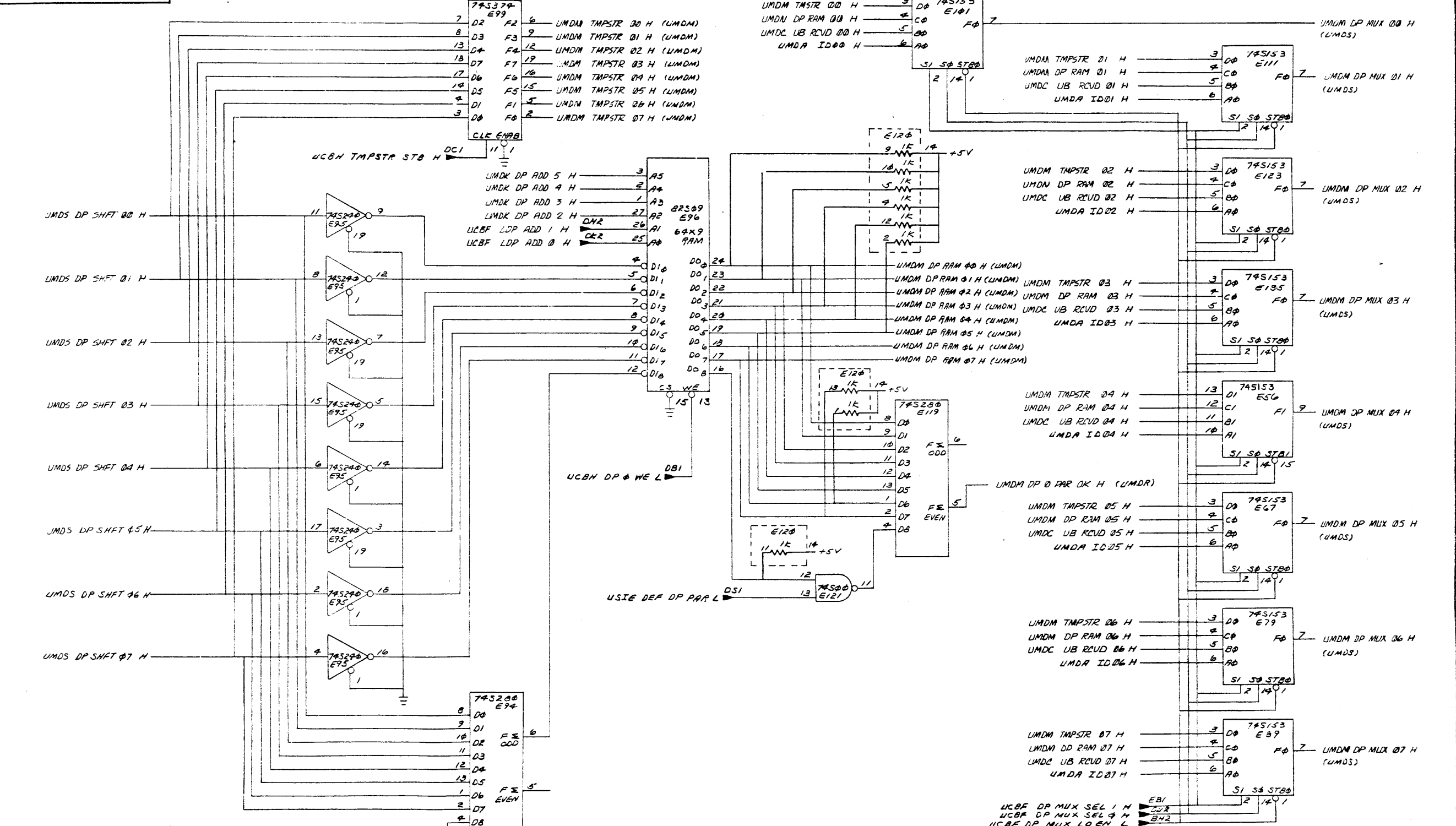
REVISIONS		
CHK	CHANGE NO.	REV.

(FAILED MAP ADDRESS) (SLOT 3)

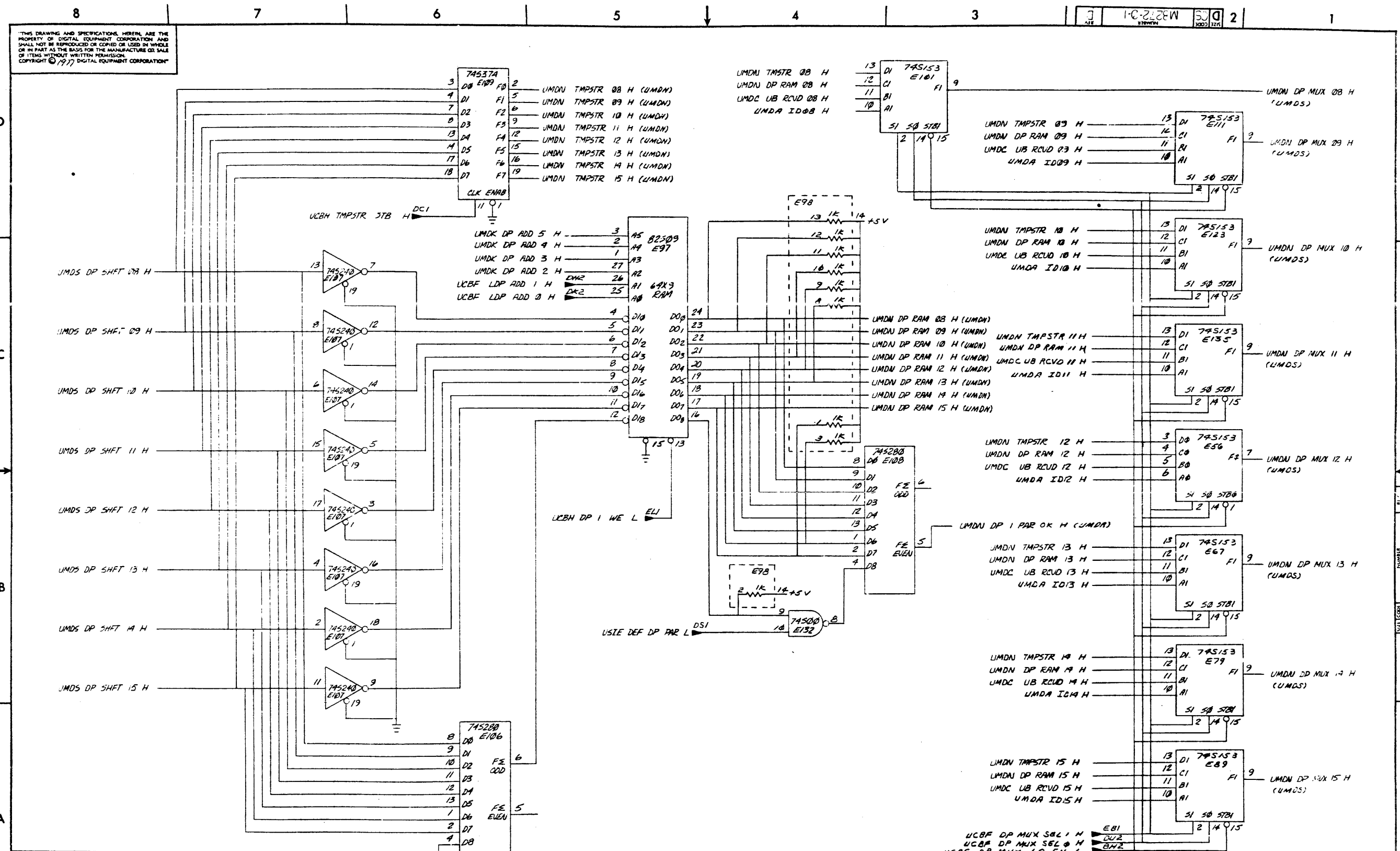
TITLE	UBA MAP & DATA PATH (UMDL)	SIZE/COOE	DCS	NUMBER	M 8272-0-1	REV.	D
SCALE	←→	SHEET	11 OF 19	DIST.			

DCS M8272-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



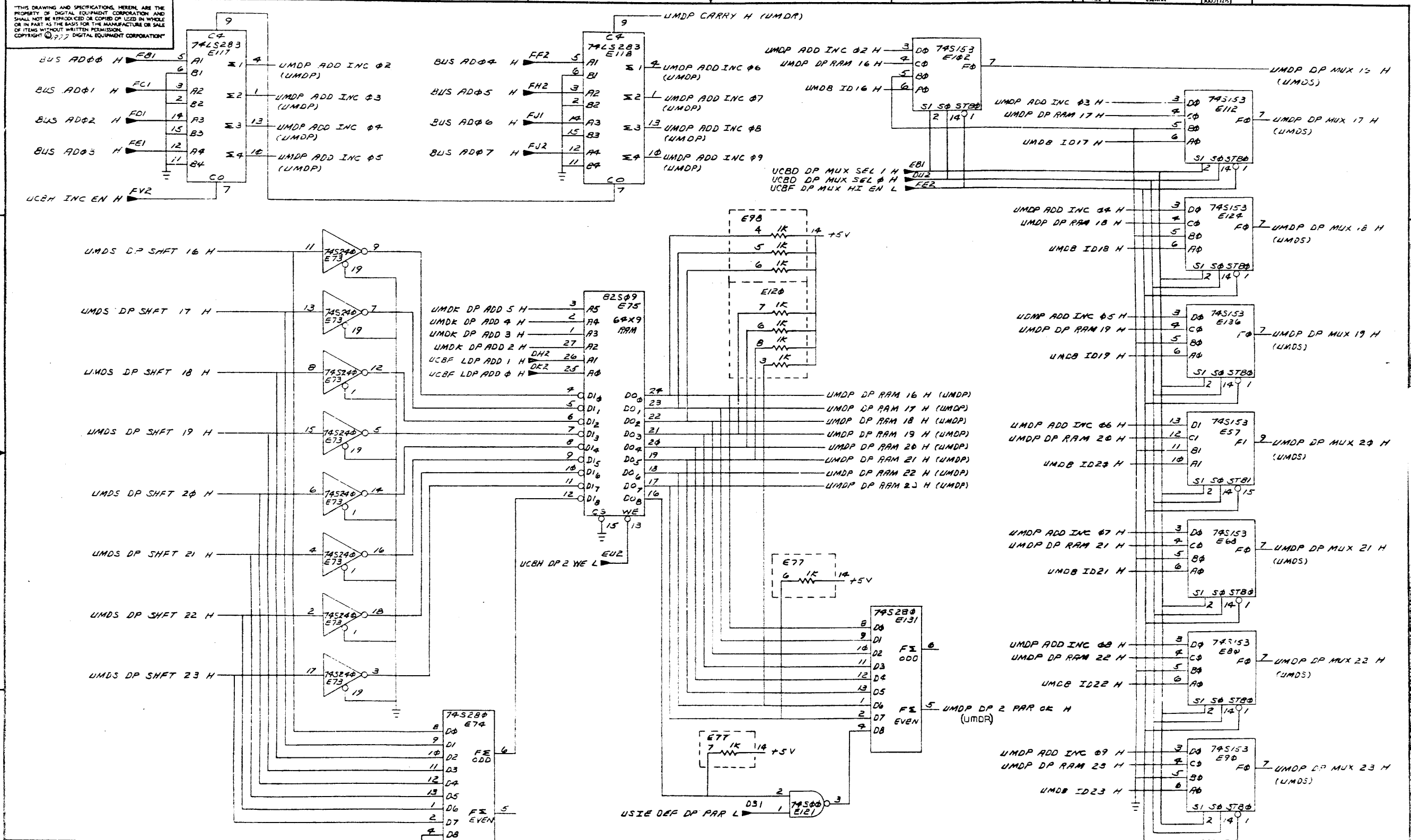
REVISIONS		
CHK	CHANGE NO.	REV.



THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

REVISIONS		
CHK	CHANGE NO.	REV

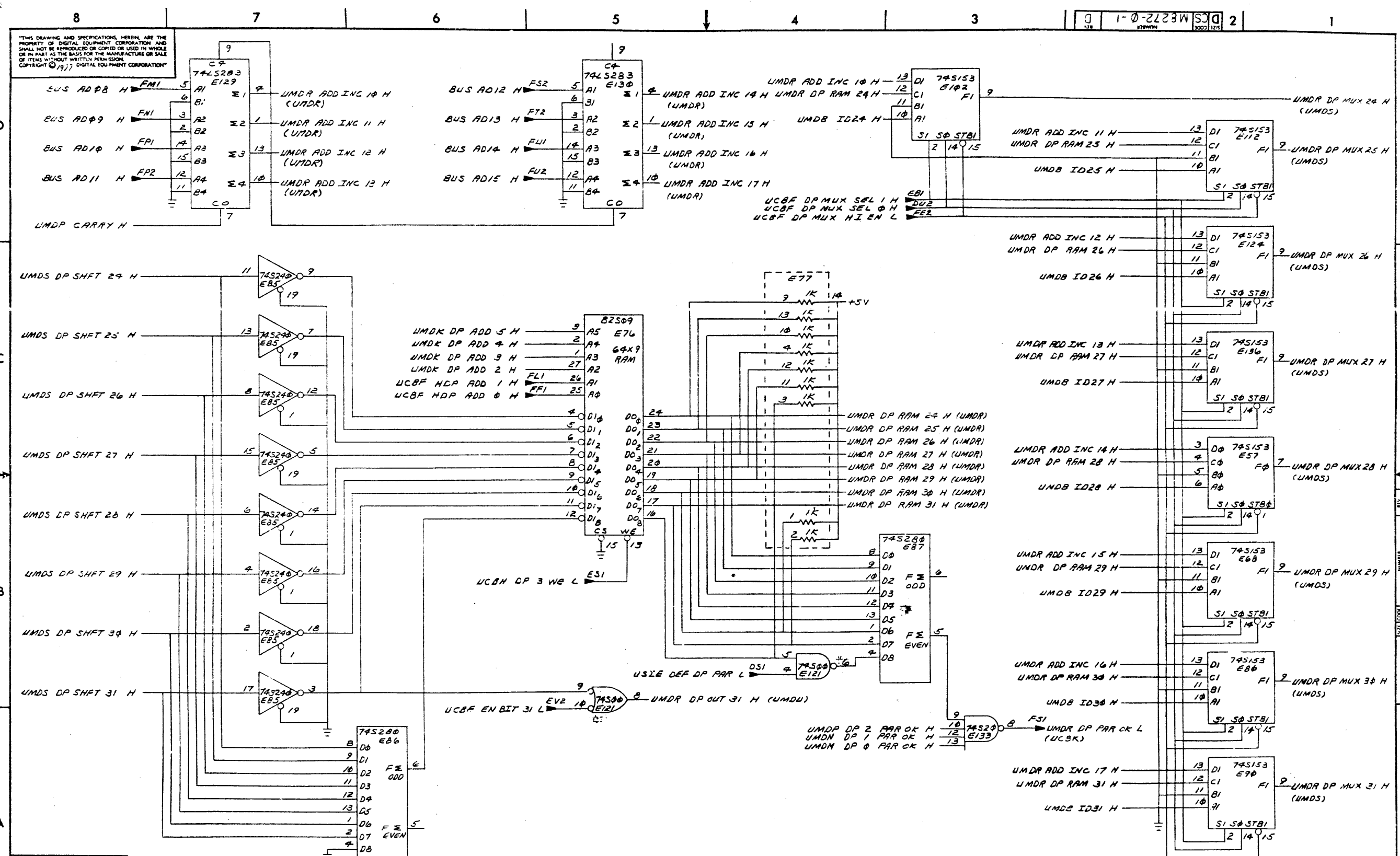
TITLE		SIZE CODE	NUMBER	REV.
CEA MAP & DATA PATH (UMDN)		DCS	ME272-0-1	3
SCALE	SHEET 13 OF 19	DIST.		



REVISIONS		
CHK	CHANGE NO.	REV

(DATA PATH 16-23)		(SLOT 3)	
TITLE	UBA MAP & DATA PATH (UMDP)	SZ CODE	DCS
NUMBER	M3272-0-1	REV.	D
SCALE	SHEET 14 OF 19	DIST.	

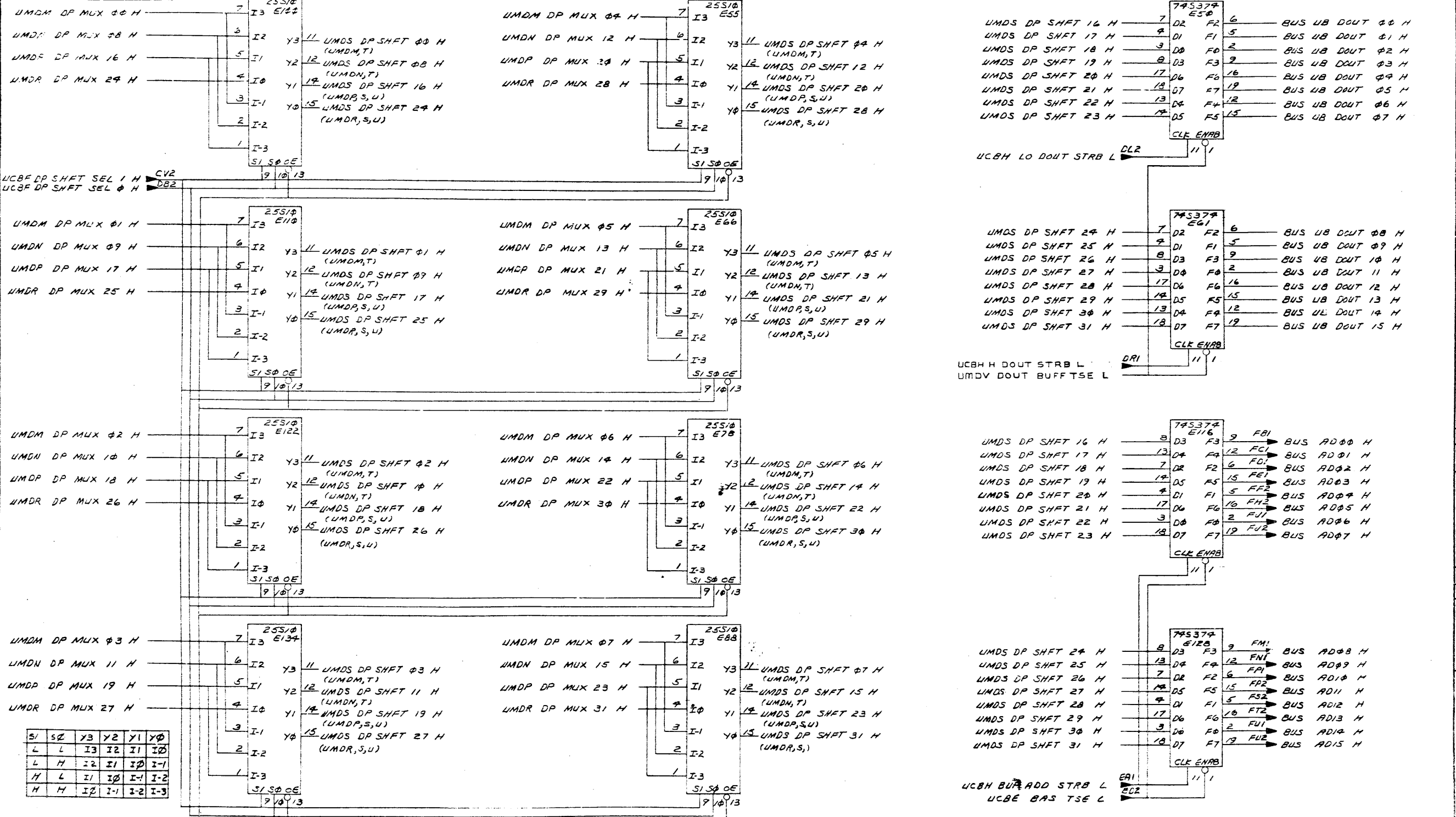
THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

(DATA PATH 24-31)		(SLOT 3)	
TITLE	UBA MAP & DATA PATH (UMDR)	SIZE CODE	DCS
NUMBER	M8272-0-1	REV.	D
SCALE	SHEET 15 OF 19	DIST.	

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



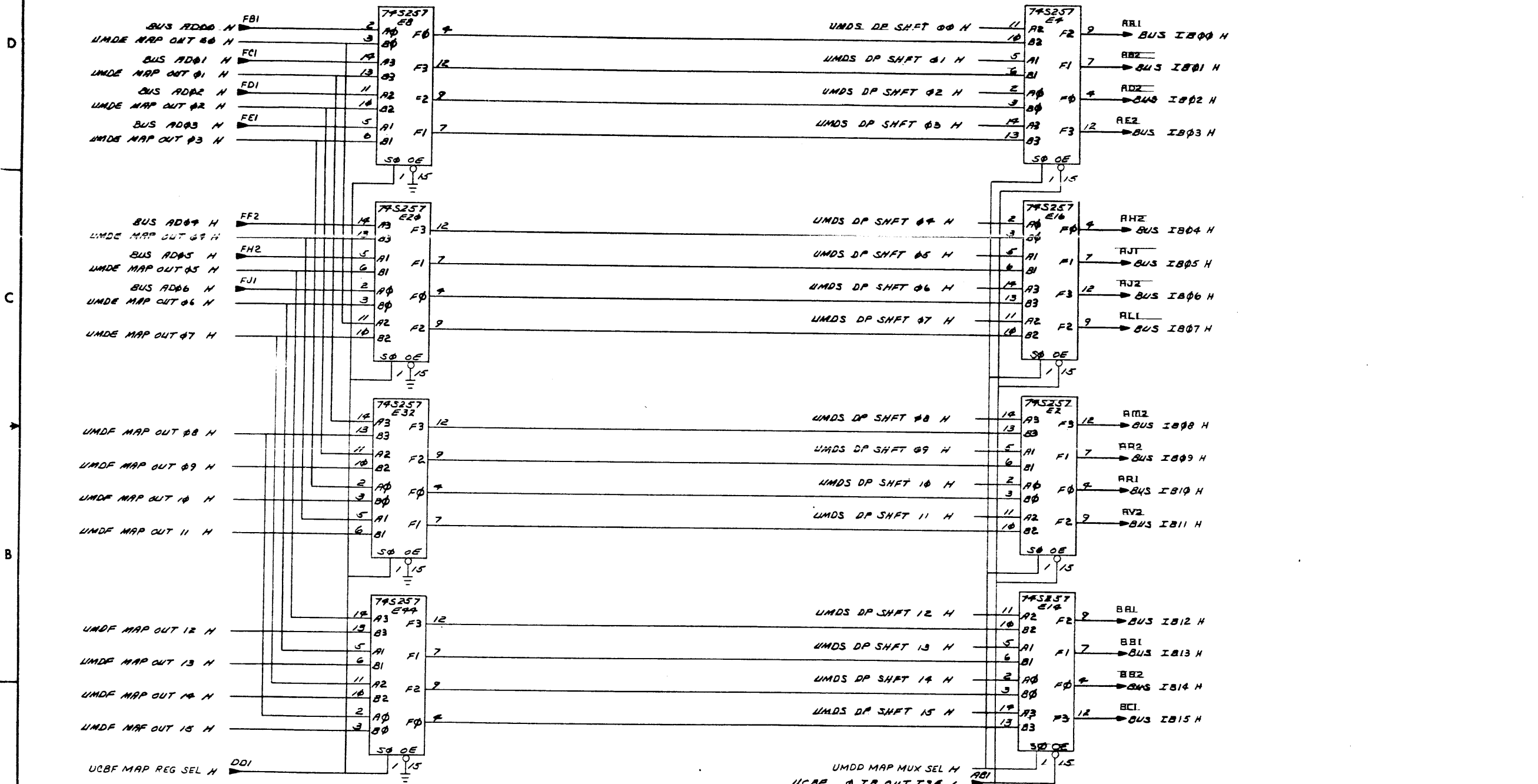
S1	S2	Y3	Y2	Y1	Y0
L	L	I3	I2	I1	I0
L	H	I2	I1	I0	I-1
H	L	I1	I0	I-1	I-2
H	H	I2	I-1	I-2	I-3

REVISIONS		
CHK	CHANGE NO.	REV.

(DATA PATH SHIFT/OUTPUT REG) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDS)	SIZE CODE	NUMBER	REV.
SCALE	SHEET 16 OF 19	DIST.	DCS M 8272-0-1	3

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

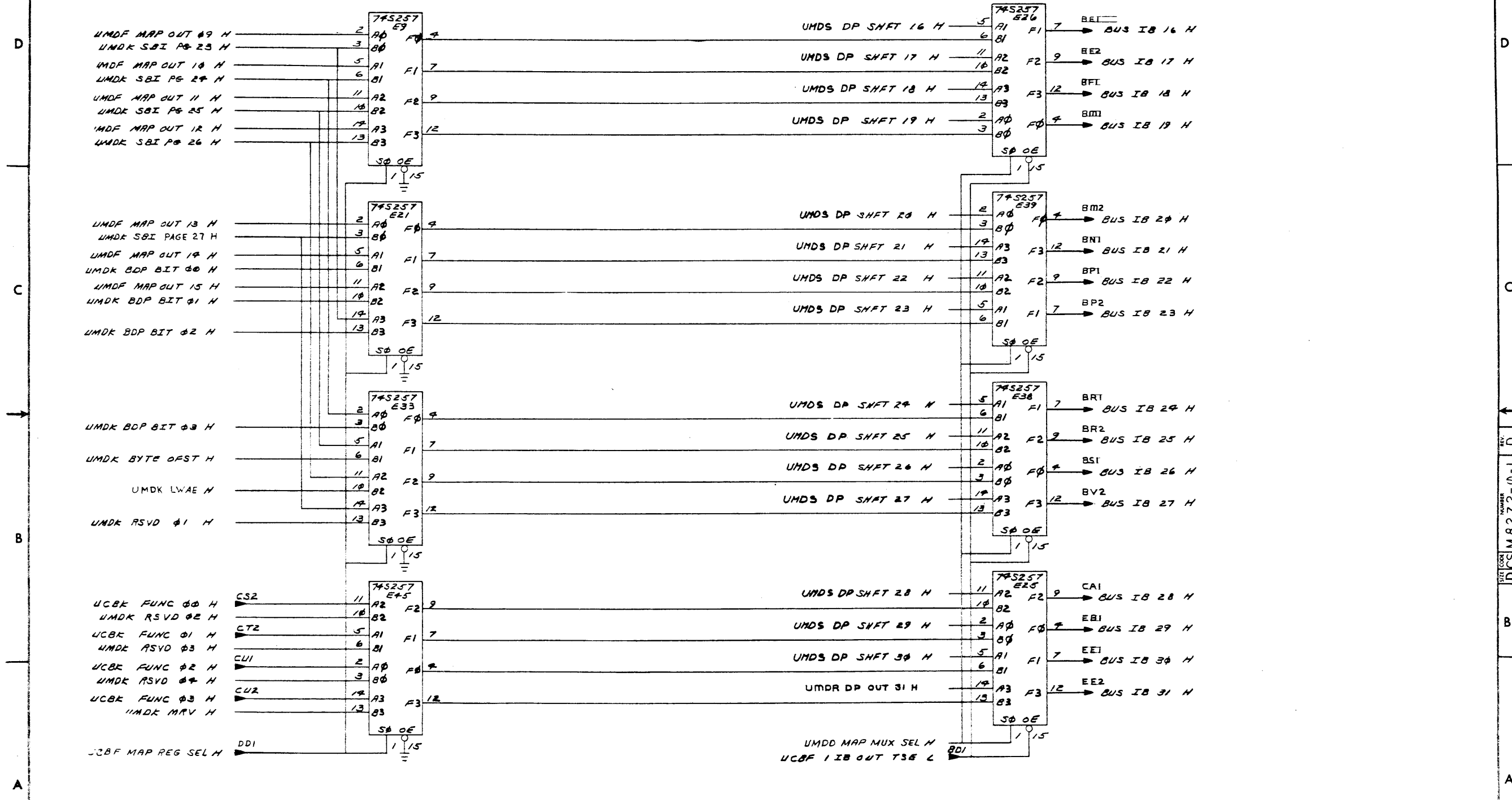


REVISIONS		
CHK	CHANGE NO.	REV.

(INT. BUS OUTPUT MUX 00-15) (SLOT 3)

TITLE	UBA MAP & DATA PATH (UMDT)	SIZE CODE	DCS	NUMBER	M8272-0-i	REV.	D
SCALE	←→	SHEET	17 OF 19	DIST.			

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

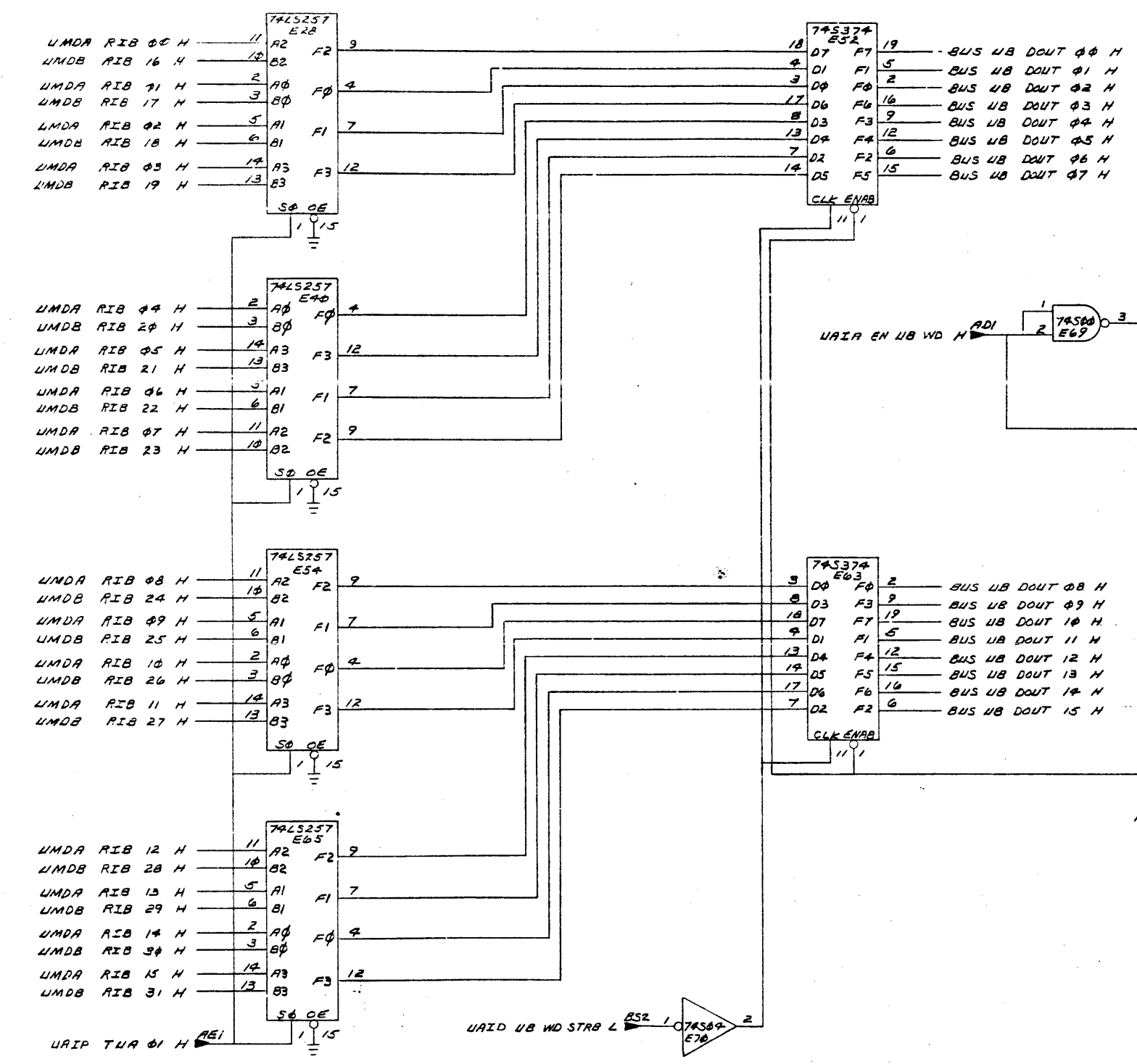


REVISIONS		
CHK	CHANGE NO.	REV.

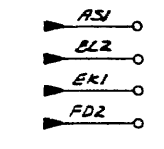
(INT. BUS OUTPUT MUX 16 31) (SLOT 3)

REV. D
NUMBER M8272-0-1
LIST LOCAL DCS

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

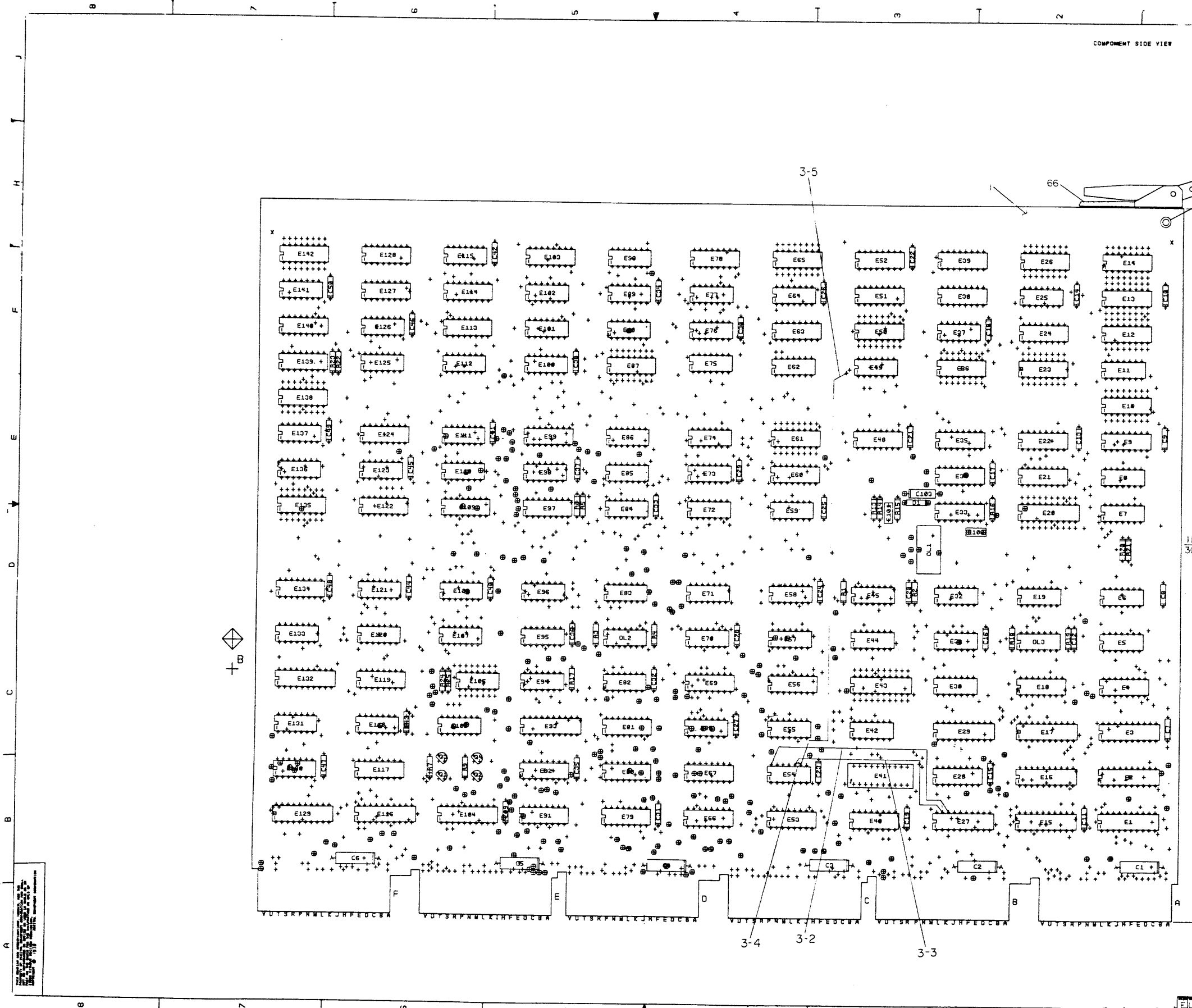


RESERVED PINS (DO NOT USE)



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SIZE CODE		NUMBER		REV.	
UBA MAP & DATA PATH (UMDV)		D CS		MS272-0-1		D	
SCALE		SHEET		DIST.			
		19 OF 19					



COMPONENT SIDE VIEW

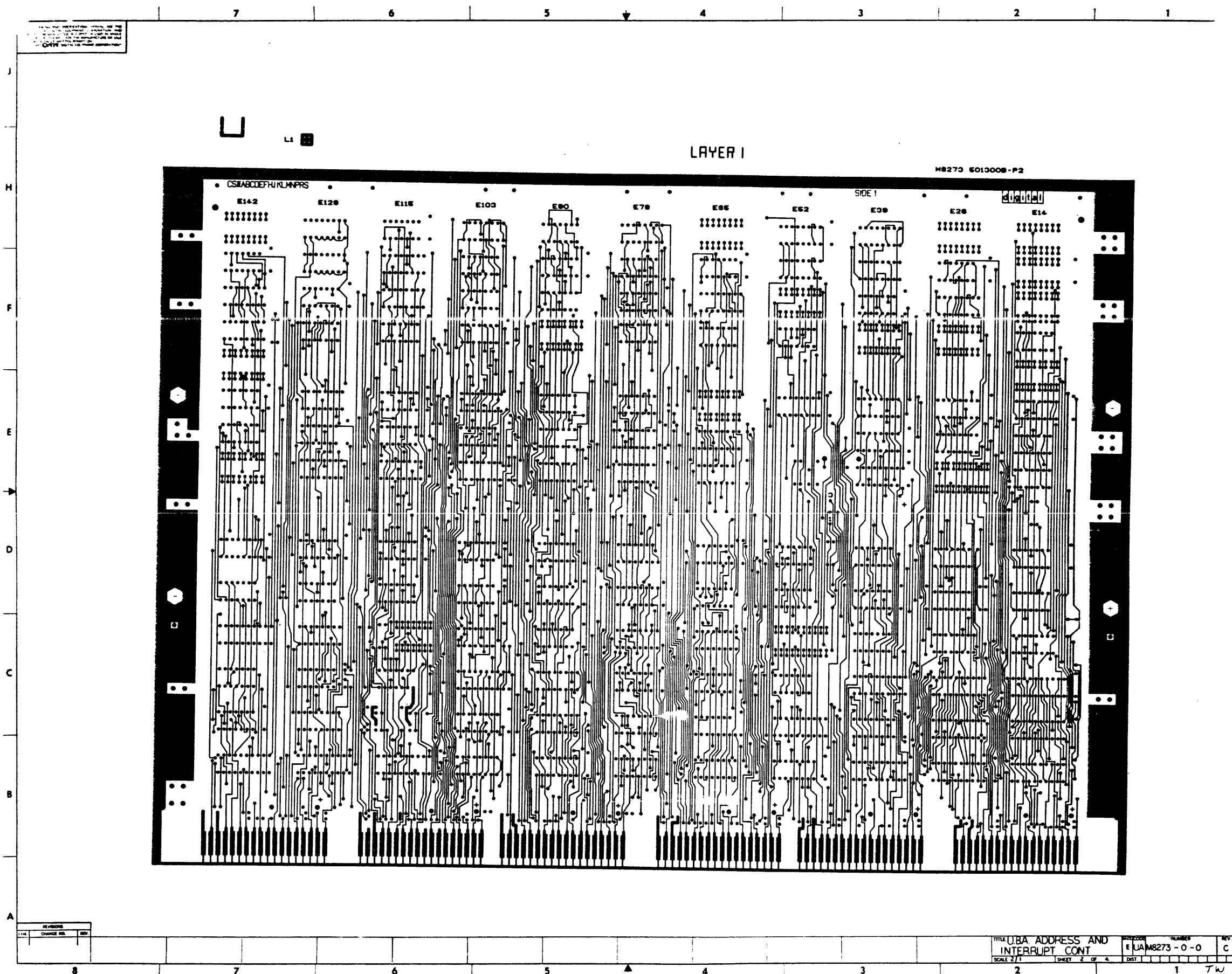
DATE	11/27/73
DESIGNER	D. MICHOULS
CHK'D BY	F. GARZA
PROJ. ENG.	W. J. ...
SCALE	1 OF 4
SHEET NUMBER	3 OF 4
PROJECT	U.S. AIR FORCE ...

digital
TITLE: UBA ADDRESS AND INTERRUPT CONT.

11.91 IN.
302.62 MM
REF.

NOTE:
1. THE FOLLOWING REFERENCE DESIGNATORS ARE NOT USED: P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ

EUA M8273-0-0



1. ALL DIMENSIONS ARE IN MILLIMETERS
 2. DIMENSIONS TO CENTER UNLESS OTHERWISE SPECIFIED
 3. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED
 4. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED
 5. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED
 6. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED
 7. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED
 8. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED
 9. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED
 10. DIMENSIONS TO DIMENSION LINES UNLESS OTHERWISE SPECIFIED

LAYER 1

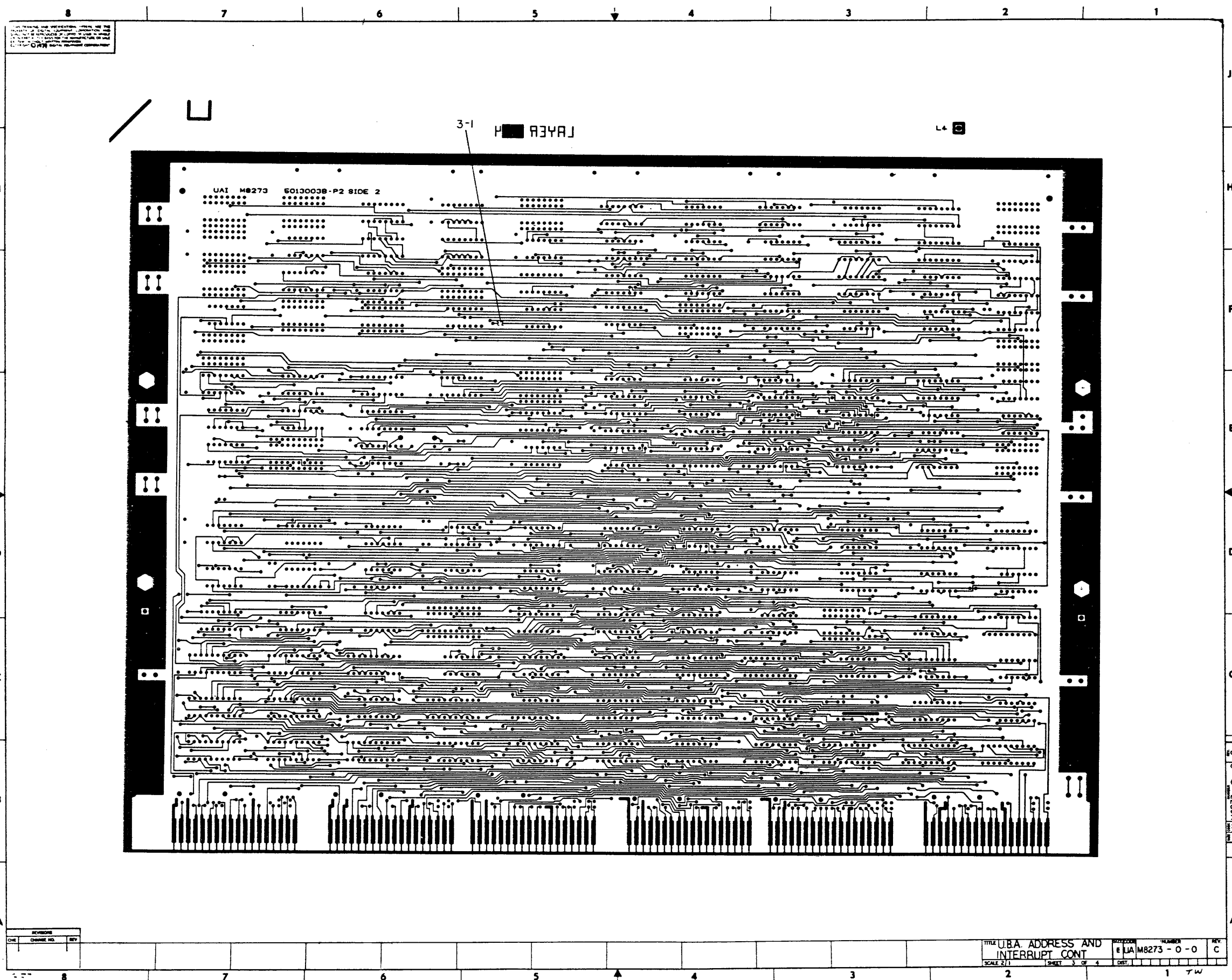
M8273 6013008-P2

CS I A B C D E F H I K L M N P R S
 E142 E128 E116 E103 E90 E78 E66 E52 E38 E26 E14

REV	DATE	BY	CHKD

TITLE UBA ADDRESS AND INTERRUPT CONT
 SCALE 2/1 SHEET 2 OF 4
 NUMBER E L A M 8 2 7 3 - 0 - 0
 REV C

E L A M 8 2 7 3 - 0 - 0 C



ALL DIMENSIONS AND SPECIFICATIONS SHALL BE THE
 PROPERTY OF ELECTRONIC COMPONENTS CORPORATION AND
 SHALL BE KEPT IN CONFIDENCE. NO PART OF THIS DRAWING
 IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR
 BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING
 PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION
 STORAGE AND RETRIEVAL SYSTEM.

UAI M8273 60130038-P2 SIDE 2

3-1 M834AJ

L4

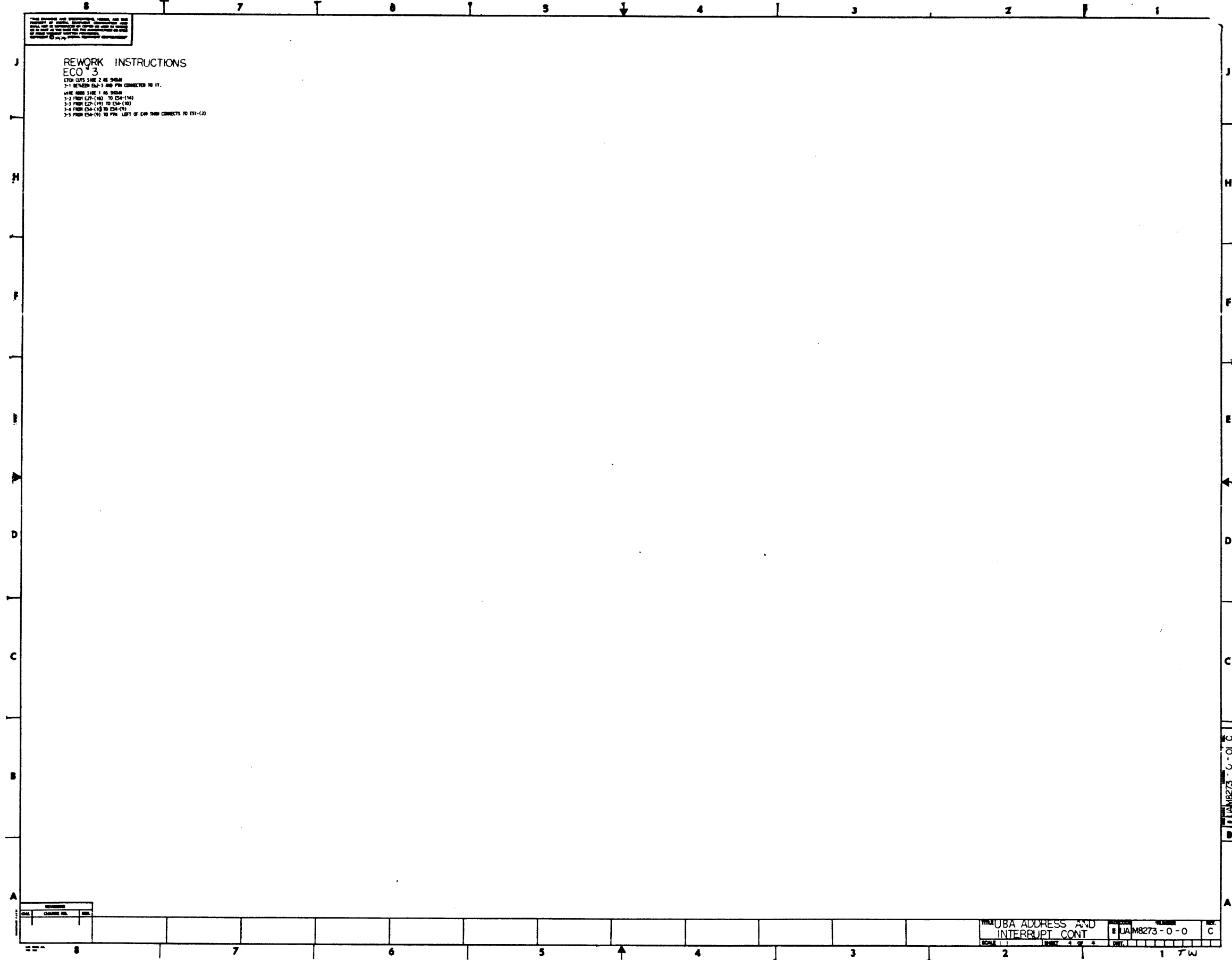
REVISIONS		
CHG	CHANGE NO.	REV

TITLE UBA ADDRESS AND INTERRUPT CONT
 SCALE 2:1 SHEET 3 OF 4
 NUMBER E UAI M8273 - 0 - 0
 REV C
 1 T W

UAI M8273 - 0 - 0 C

THIS DRAWING AND SPECIFICATIONS SHALL BE THE PROPERTY OF THE COMPANY. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS TO BE RETURNED TO THE COMPANY UPON COMPLETION OF THE PROJECT.

REWORK INSTRUCTIONS
ECO 3
 ETCH CRYSTALS 2 AS SHOWN
 3-1 BETWEEN CS4-3 AND PIN CONNECTOR TO IT.
 WIRE BOND SIDE 1 AS SHOWN
 3-2 FROM E27-(18) TO CS4-(14)
 3-3 FROM E27-(19) TO CS4-(10)
 3-4 FROM CS4-(10) TO CS4-(11)
 3-5 FROM CS4-(11) TO PIN LEFT OF LOW TRIM CONNECTS TO E51-(12)



REV	DESCRIPTION	DATE

MILWAUKEE ADDRESS AND INTERRUPT CONT
 EJA M8273 - 0 - 0
 SCALE: 1:1 SHEET 4 OF 4
 1 TW

MILWAUKEE ADDRESS AND INTERRUPT CONT

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER VARIATION	REFERENCE DESIGNATOR
					00		
1	1		5013003-00	U.A.I.	1		
2	2		1000024-00	470.0 MMF 100V 5%200PPM MICA	1		C101
3	3		1000042-00	1000.0 MMF 100V 5%200PPM MICA	1		C102
4	4		1009964-00	.68 MFD 35V 10% S.TANT	1		C103
5	5		1012084-01	8 MFD 25V +75-10% AL EL	6		C1-C6
6	6		1012784-00	.047 MFD 50V +80-20% CER	44		C7-C50
7	7		1511686-00	DEC5433 FET N 350MW 10 25 1A	4		Q1-Q4
8	8	BLANK			0		
9	9		1100114-00	D 664 RS\75PCB PIV= 25V SP	1		D1
10	10		1300247-00	120.0 .25 W 5.0 % CC	2		R20,R22
11	11		1313349-00	33.0 K .25 W 5.0 % CC	1		R15
12	12		1300219-00	68.0 .25 W 5.0 % CC	1		R14
13	13		1300271-00	220.0 .25 W 5.0 % CC	5		R1,R3,R4,R18,R19
14	14		1300309-00	390.0 .25 W 5.0 % CC	1		R2
15	15		1300365-00	1.0 K .25 W 5.0 % CC	7		R5-R7,R9,R17,R24,R25
16	16	BLANK			0		
17	17		1301775-00	820.0 .25 W 5.0 % CC	1		R13
18	18		1302391-00	20.0 K .25 W 5.0 % CC	1		R16
19	19		1300295-00	330.0 .25 W 5.0 % CC	2		R21,R23
20	20		1312628-01	R NETWORK 14-176.5 11-375 16PIN	2		E56,E69
21	21		1610080-00	DELAY= 18NS,0TAPS	1		DL1
22	22		1612463-00	DELAY= 150NS,10TAPS	2		DL2,DL3
23	23		1910545-00	74S112 FF-JK DUAL,EDGE TRIG	1		E109
24	24		1909705-00	DEC 8881 NAND GATE-QUAD 2IN 0	4		E55,E68,E82,E94
25	25		1912746-00	DEC 74S37 NAND GATE-QUAD 2IN 3	1		E30
26	26		1910532-00	74S00 NAND GATE-QUAD 2IN	3		E85,E118,E133
27	27		1910534-00	74S04 INVERTER GATE-HEX 1I	4		E49,E98,E111,E72
28	28		1910536-00	74S10 NAND GATE-TRIPLE 3IN	3		E100,E131,E59
29	29		1910537-00	74S11 AND GATE-TRIPLE 3INP	1		E6
30	30		1910549-00	74S158 MUX 1 OF 2 (QUAD)	1		E139

REVISION HISTORY		BASIC PART NO: M8273		DRN:	P.SANFILLIPO	DATE:	26-JUN-79	B I G I T A L		
ENG	ECO NUMBER	REV	SECTION A OF A	CHK'D:	L.GIAMMARINO	DATE:	26-JUN-79	TITLE PARTS LIST		
								UBA ADDRESS & INTERRUPT CTRL		
								DES.ENG: B.HALL		
								RESP.ENG.: B.HALL		
								MFG.ENG.: M.TERRILA		
								ASSEMBLY NUMBER:		
								TOP DOCUMENT NUMBER:		
								FILE NAME:		
								EDIT #:		
								D-UA-M8273-0-0		
								B-DD-M8273-0-0		
								Z0716D.FLS		
								13		

*THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1980, DIGITAL EQUIPMENT CORPORATION *

TW

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	REFERENCE DESIGNATOR
					00	
31	31		1910544-00	74S74 FF-D DUAL,EDGE TRIGG	7	E45,E102,E107,E125,E32,E112,E96
32	32		1910956-00	74S151 MUX 1 OF 8	1	E140
33	33		1910957-00	74S175 FF-D QUAD COMMON CLO	6	E48,E92,E99,E119,E134,E124
34	34		1910436-00	DEC 74123 ONE SHOT-DUAL,RETRIG	1	E33
35	35		1911469-00	DEC 3640 RECEIVER,BUS,QUAD,U	4	E42,E54,E70,E95
36	36		1911579-00	8641 TRANSCEIVER,BUS,QUA	6	E66,E67,E79,E80,E81,E91
37	37		1911641-00	SN 74S257 MUX,QUAD 2 TO 1	5	E4,E18,E28,E40,E53
38	38		1911675-00	74S138 DECODER/DEMUX 3-8 LIN	2	E114,E117
39	39		1911676-00	74S139 DECODER-DUAL TWO-IMP	1	E97
40	40		1912389-00	74S02 NOR GATE-QUAD 2IN,PO	3	E19,E105,E141
41	41		1912389-00	74S08 AND GATE-QUAD 2IN,PO	2	E5,E44
42	42		1912799-00	LS00 NAND-GATE-QUAD 2IN,P	5	E57,E74,E86,E120,E121
43	43		1912801-00	LS02 NOR-GATE-QUAD 2IN	3	E31,E89,E126
44	44		1912803-00	LS04 INVERTER GATE-HEX 1I	2	E71,E75
45	45		1912805-00	LS08 AND GATE-QUAD 2IN,PO	2	E84,E98
46	46		1912824-00	LS74 FF-D DUAL,EDGE TRIGG	6	E62,E83,E101,E108,E115,E136
47	47		1912849-00	LS161 COUNTER,SYNCHR,4BIT	2	E51,E52
48	48		1912810-00	LS20 NAND GATE-DUAL 4IN	1	E58
49	49		1912813-00	LS27 NOR GATE-TRIPLE 3IN	3	E73,E130,E137
50	50		1912815-00	LS30 NAND GATE-SINGLE 8IN	2	E7,E11
51	51		1912816-00	LS32 OR GATE-QUAD 2IN,POS	5	E8,E25,E90,E110,E123
52	52		1912821-00	LS54 A-O-I GATE,3-2-2-3IN	3	E37,E76,E77
53	53		1912807-00	*** THIS ITEM IS NOT USED ***	-	
54	54		1912828-00	LS85 COMPARATOR,4BIT MAGN	1	E60
55	55		1912834-00	LS112 FF-JK DUAL,EDGE TRIG	7	E9,E21,E22,E24,E38,E78,E103
56	56		1912697-00	LS174 FF-D HEX W/CLEAR	1	E34
57	57		1912848-00	LS158 MUX 1 OF 2 (QUAD)	1	E39
58	58		1912796-00	74148 EXCODER,PRIORITY,8 T	1	E122
59	59		1913294-00	93S16 COUNTER,SYNCH UP BIN	3	E113,E127,E128
60	60		1913670-00	74S373 LATCH 8BIT TRASP TR	6	E2,E16,E29,E104,E116,E129
61	61		1913671-00	74S374 FF-D OCTAL TRISTATE	7	E1,E3,E15,E17,E27,E93,E132
62	62		1913493-00	74S241 OCTAL BUFFER,TRI-STA	1	E41
63	63		1910550-00	74S174 FF-D HEX	2	E35,E63
64	64		1910542-00	74S64 A-O-I GATE 4-2-3-2	1	E64
65	65	BLANK			0	
66	66		1210711-02	HANDLE,MODULE,HEX	1	
67	67		9000024-01	EYELET, ROLLED FLANGE, .121 OD X	12	
68	68		9105740-55	WIRE(WRAP)30AWG UL1423	A/R	
69	69		9008864-00	TAPE, DOUBLE COATED, 3/8" WIDE X	A/R	

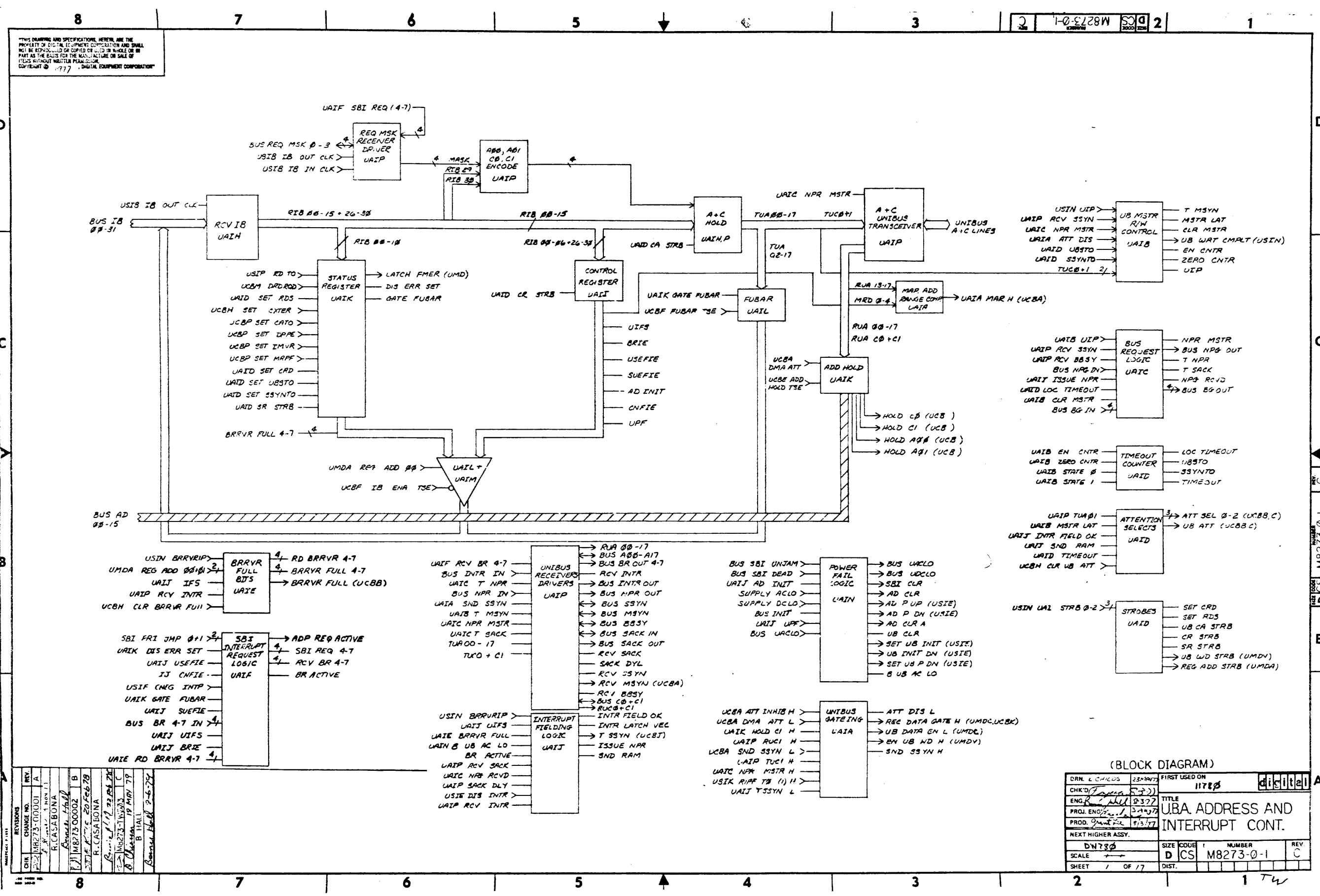
70 NOTE: I.C. SPARE LOCATIONS ARE: E10,E12,E13,E14,E20,E23,E26,E36,

71 NOTE: E43,E50,E61,E65,E87,E135,E138,E142,E106.

D	I	G	I	T	A	L	TITLE	SECTION A	OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							UBA ADDRESS & INTERRUPT CTRL			K	PL	M8273-0-DBP	II

TW

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



(BLOCK DIAGRAM)

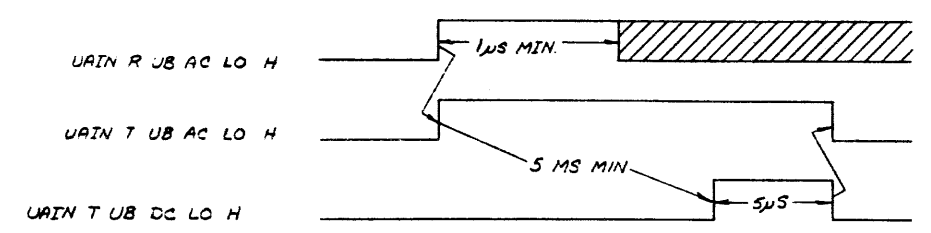
DRN. L. CHILDS	23-1117	FIRST USED ON	11788	Digital
CHK'D	J. J. J.	DATE	7-77	
ENGR.	J. J. J.	NO.	2377	
PROL. ENG.	J. J. J.	DATE	3-77	
PROD. DATE	9/3/77			
NEXT HIGHER ASSY.				
DNT80		SIZE	CODE	NUMBER
SCALE	+	D	CS	M8273-0-1
SHEET	1 OF 17	DIST.		

REV.	CHG. NO.	DATE	BY	REASON
1	1	1 Nov 77	R. CASABONA	Initial
2	1	20 Feb 78	R. CASABONA	Change
3	1	19 Mar 79	B. TALL	Change
4	1	7-77	J. J. J.	Change

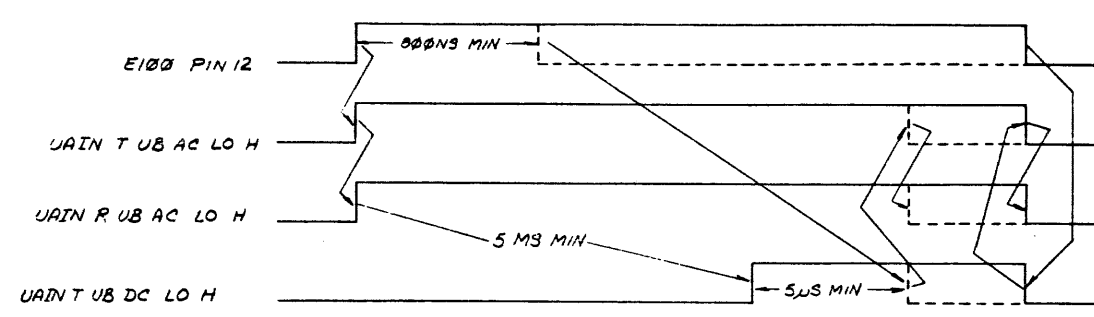
"THE DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"

UNIBUS ACLO DCLO SEQUENCER

UNIBUS INITIATED

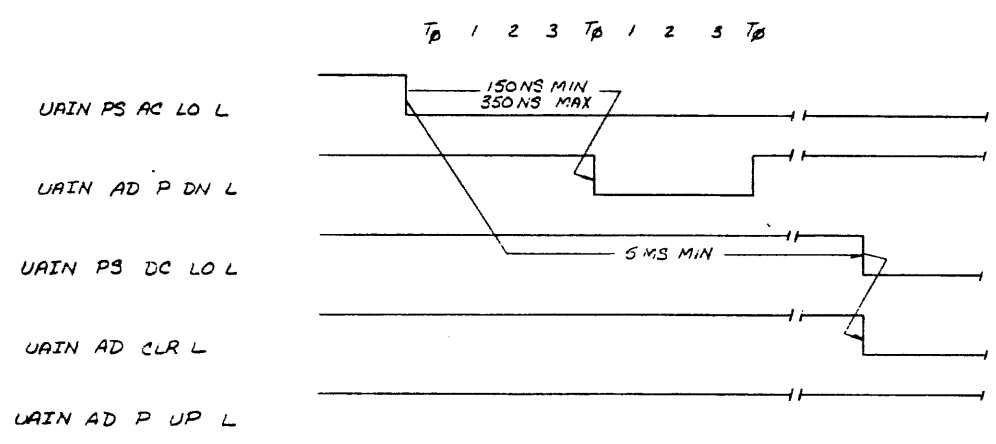


UBA INITIATED

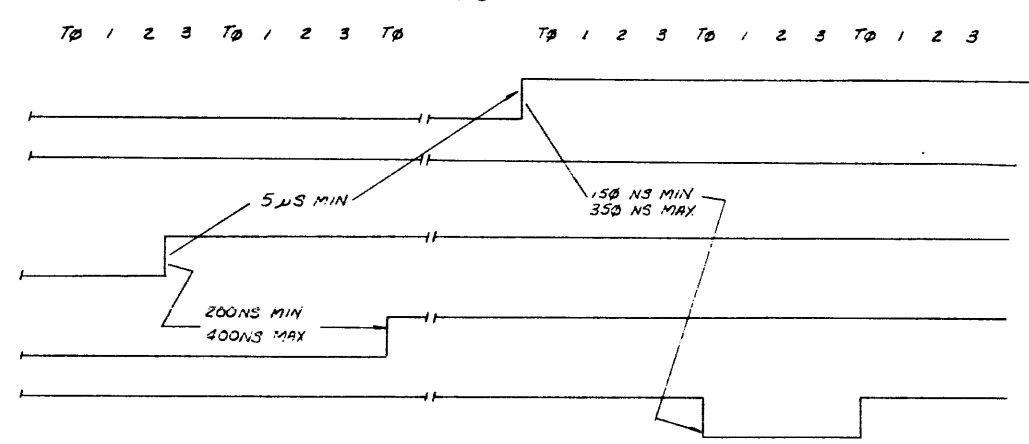


ADAPTER STATUS SEQUENCER

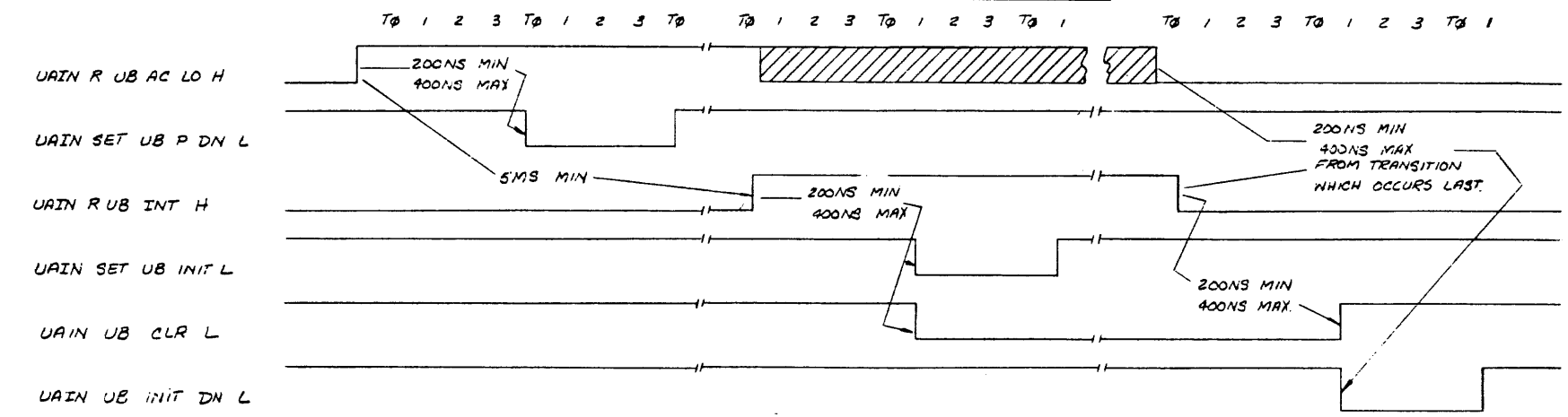
POWER DOWN



POWER UP



UNIBUS STATUS SEQUENCER

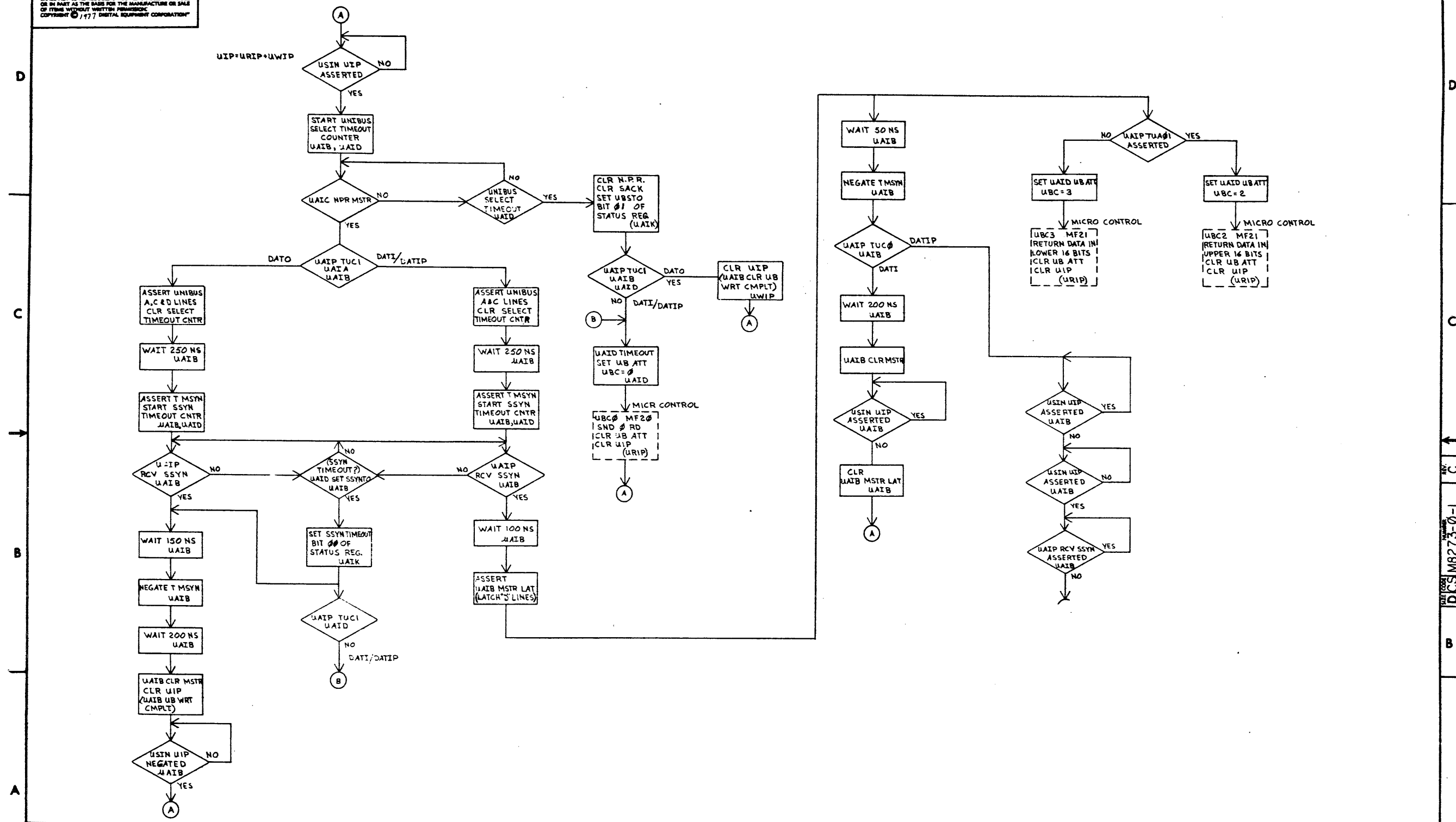


▨ = ASSERTED OR NEGATED

REVISIONS		
CHK	CHANGE NO.	REV.

(POWER FAIL TIMING DIAGRAM)

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

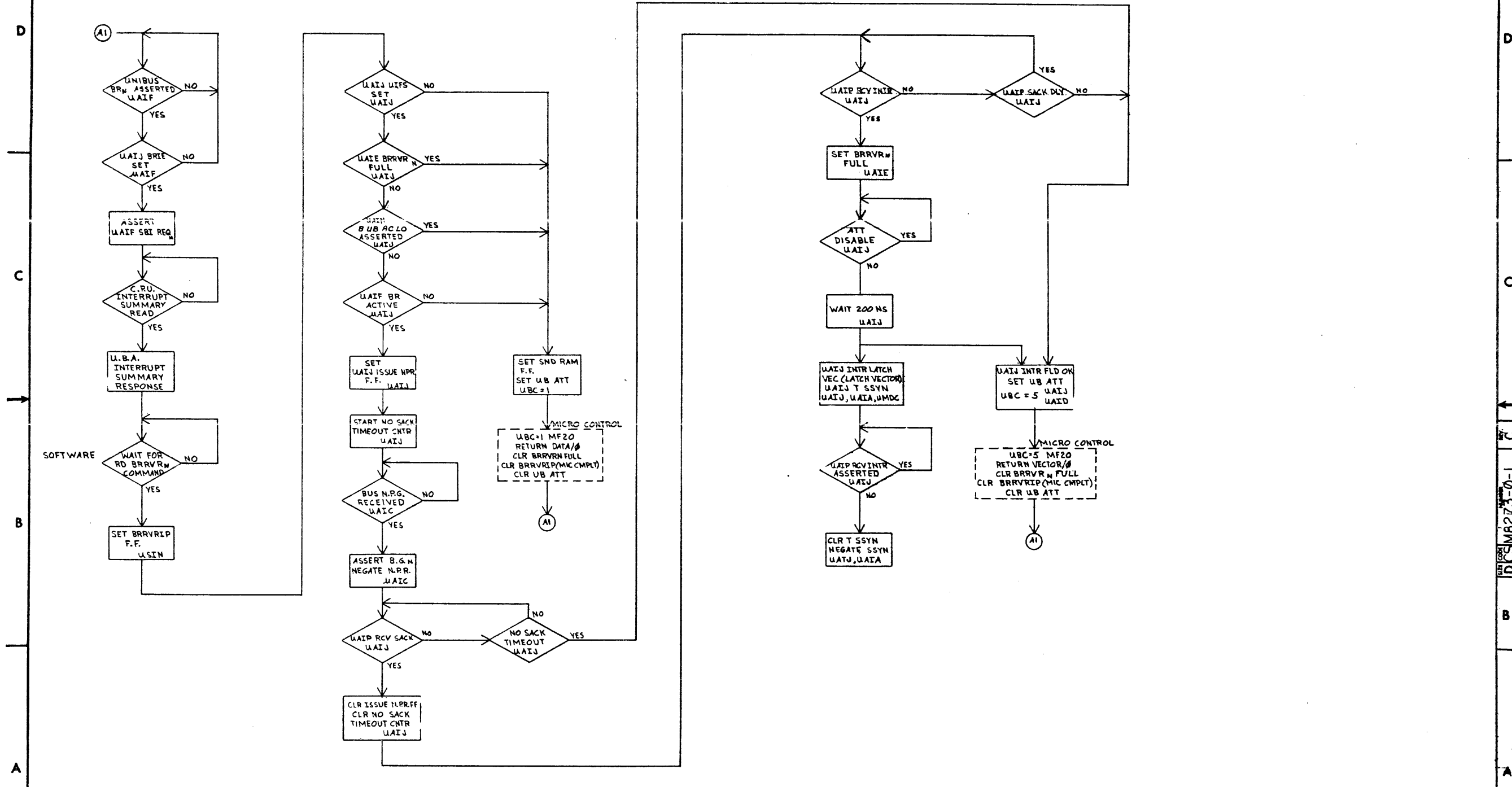


REVISIONS		
CHK	CHANGE NO.	REV.

(UNIBUS BUS MASTER CONTROL FLOWS)

TITLE	U.B.A. ADDRESS AND INTERRUPT CONT.	SIZE CODE	D CS	NUMBER	M8273-0-1	REV.	C
SCALE	++	SHEET	3 OF 17	DIST.			

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



REVISIONS		
CHK	CHANGE NO.	REV.

(UNIBUS INTERRUPT FIELDING FLOWS)

TITLE U.B.A. ADDRESS AND INTERRUPT CONT. SIZE/COO DCS M8273-0-1 NUMBER REV. C

SCALE SHEET 4 OF 17 DWT.

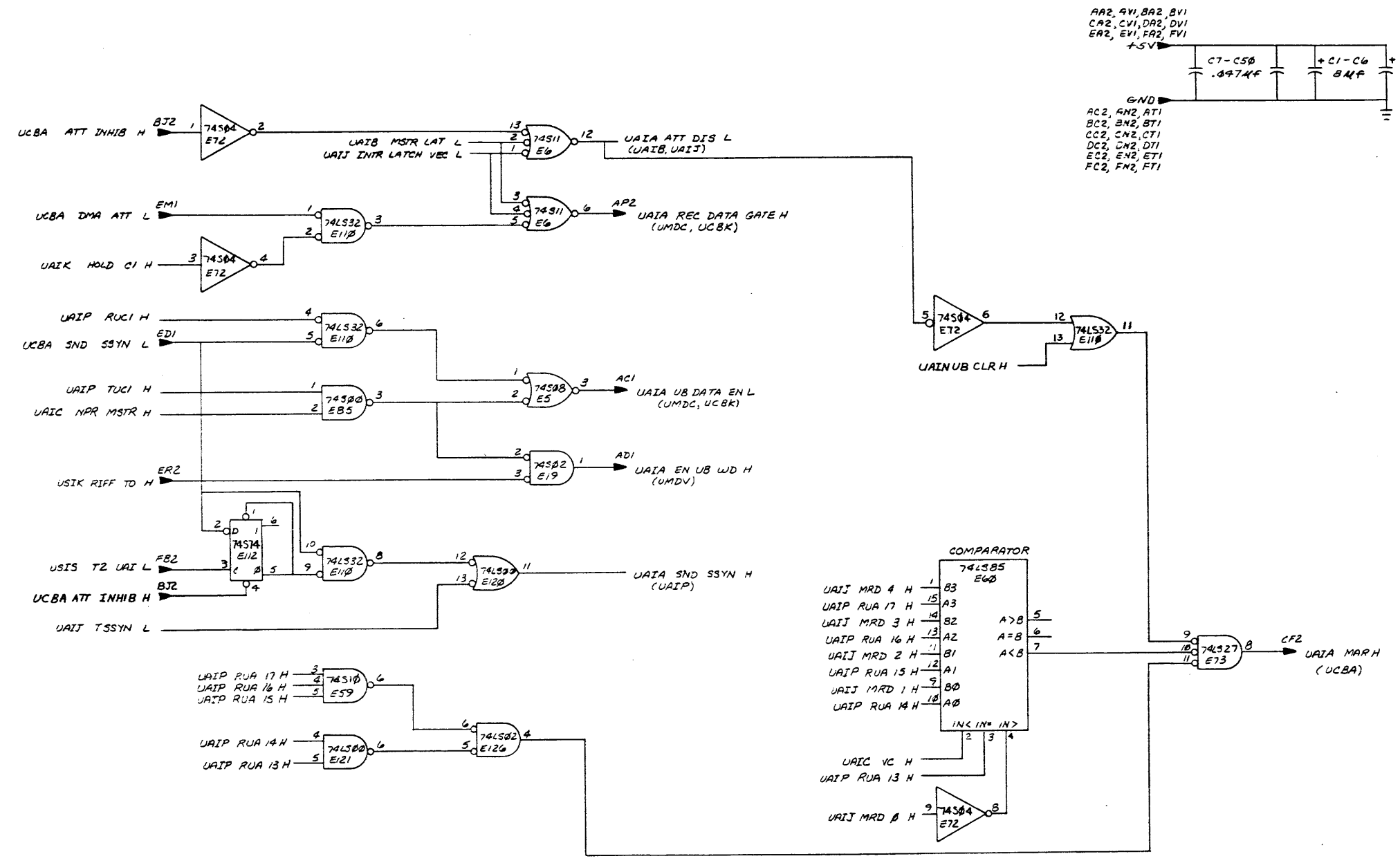
DCS M8273-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

1-0-5228W DCS M8273-0-1 2

D
C
B
A

D
C
B
A



REVISIONS		
CHK	CHANGE NO.	REV.

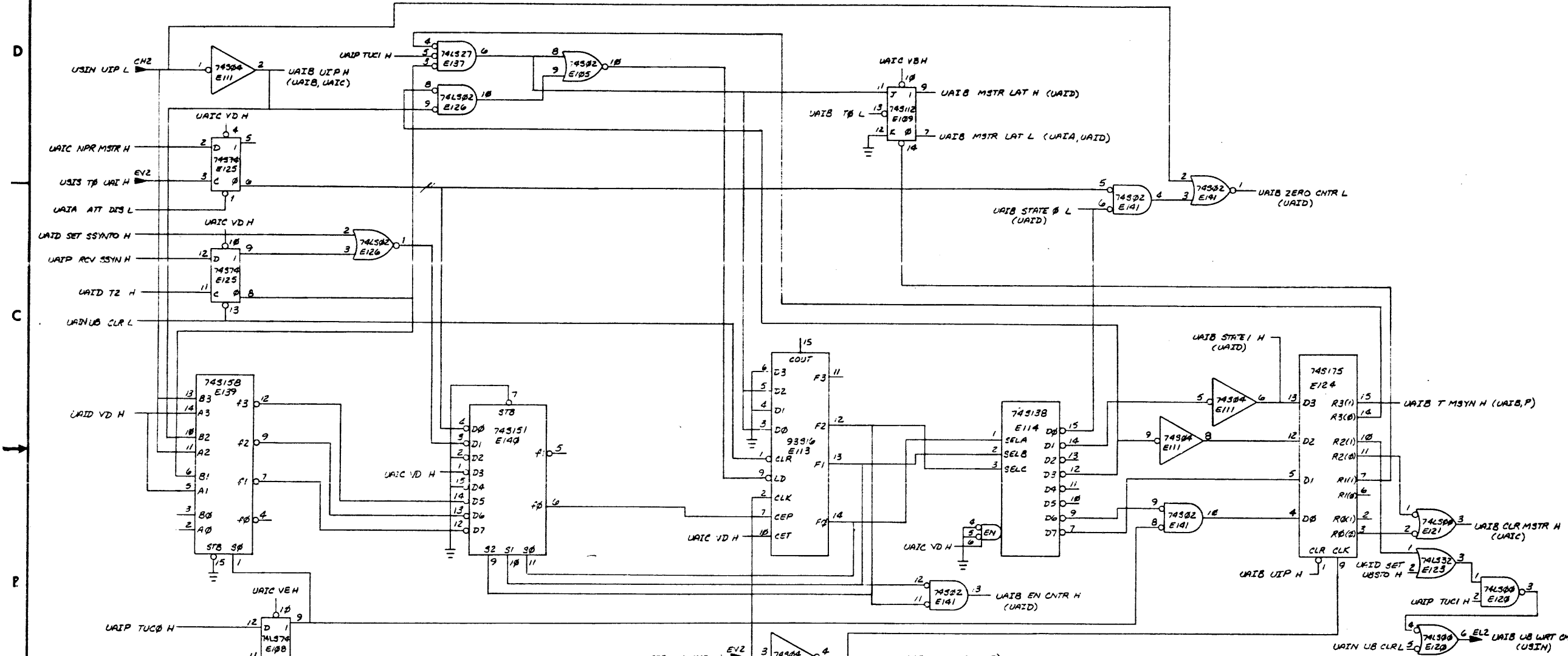
(MAP ADDRESS RANGE, UNIBUS GATEING) (SLOT 4)

TITLE	UBA ADDRESS AND INTERRUPT CONT. (UAIA)	SIZE CODE	DCS	NUMBER	M8273-0-1	REV.	C
SCALE		SHEET	5	OF	17	DIST.	

8 7 6 5 4 3 2 1 TW

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

1-0-2728 DCS M8273-0-1 2



74LS158 2:1 MUX

STRB	S0	OUTPUT
H	X	H
L	L	A → F
L	H	B → F

FUNCTION TUCI H TUCO H

FUNCTION	TUCI H	TUCO H
DATI	0	0
DATIP	0	1
DATO	1	0

74LS151 8:1 MUX

STRB	S2	S1	S0	OUTPUT F#
H	X	X	X	H
L	-	L	L	D0 → FB
L	L	L	L	D1 → FB
L	L	L	H	D2 → FB
L	L	H	L	D3 → FB
L	L	H	H	D4 → FB
L	H	L	L	D5 → FB
L	H	L	H	D6 → FB
L	H	H	L	D7 → FB
L	H	H	H	D7 → FB

* IF SSYNTO (SSYN TIMEOUT) OCCURS DURING A DATI OR DATIP, THE SEQUENCE WILL FOLLOW THAT OF A DATO

FUNCTION	OUTPUTS OF S138	INPUTS TO S151 + S158
0	FUNCTION	TEST
1	ASSERT T MSYN	REC SSYN OR SET SSYNTO
2	NEGATE T MSYN	TRUE
3	UB WT CMLPT CLR MSTR	UIP
4		
5		
6		
7		

FUNCTION	OUTPUTS OF S138	INPUTS TO S151 + S158
0	FUNCTION	TEST
1	ASSERT T MSYN	REC SSYN OR SET SSYNTO
2		
3		
4		
5	ASSERT MSTR LAT NEG T MSYN	TRUE
6	CLR MSTR	UIP
7	NEGATE MSTR LAT	TRUE

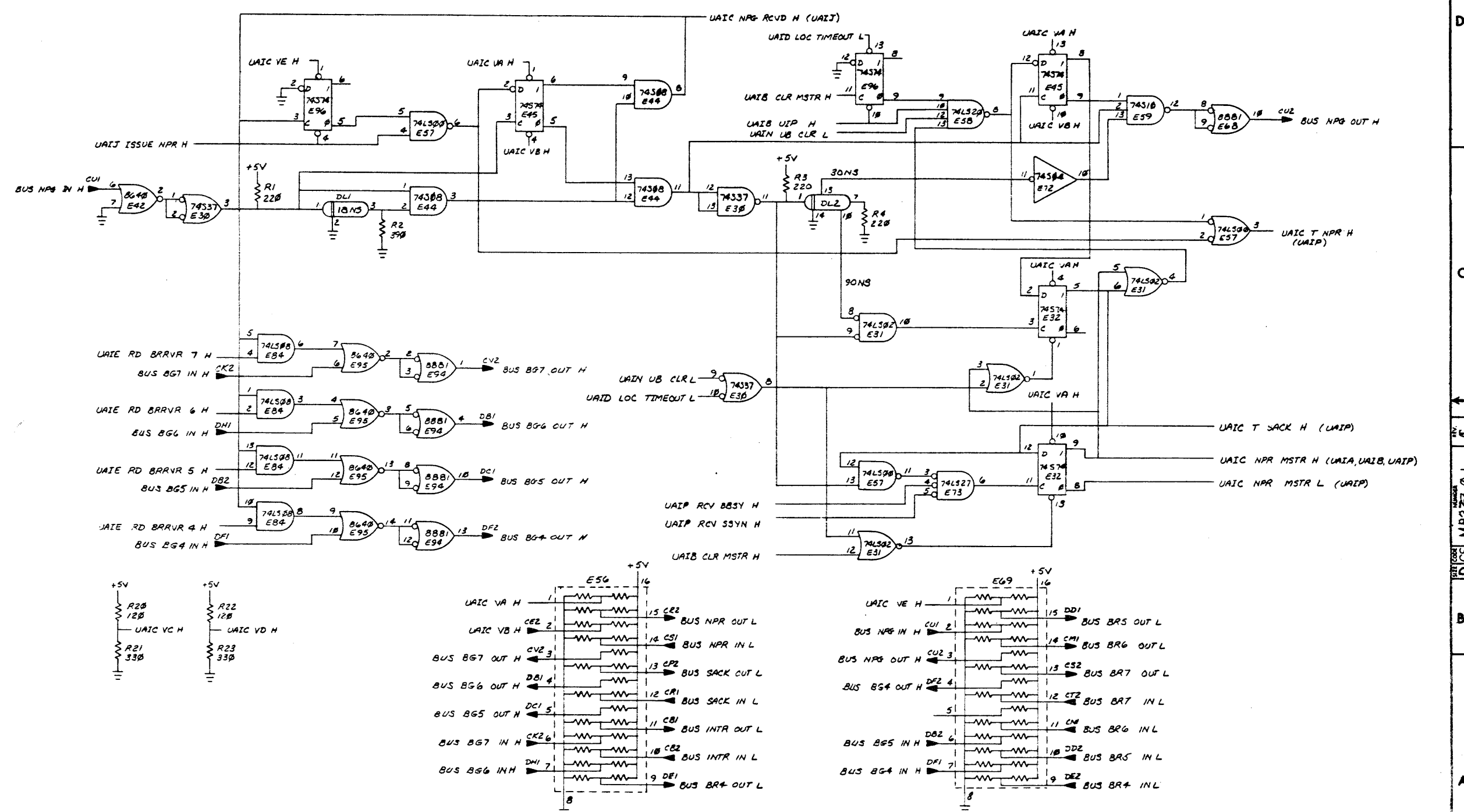
FUNCTION	OUTPUTS OF S138	INPUTS TO S151 + S158
0	FUNCTION	TEST
1	ASSERT T MSYN	REC SSYN OR SET SSYNTO
2		
3		
4		
5	ASSERT MSTR LAT NEG T MSYN	UIP
6	NEGATE MSTR LAT	UIP
7		SSYN

REVISIONS

CHK	CHANGE NO.	

(UNIBUS MASTER R/W CONTROL) (SLOT 4)
 TITLE UBA ADDRESS AND INTERRUPT CONT. (UAIB) DCS M8273-0-1
 SCALE SHEET 6 OF 17 DIST.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION.



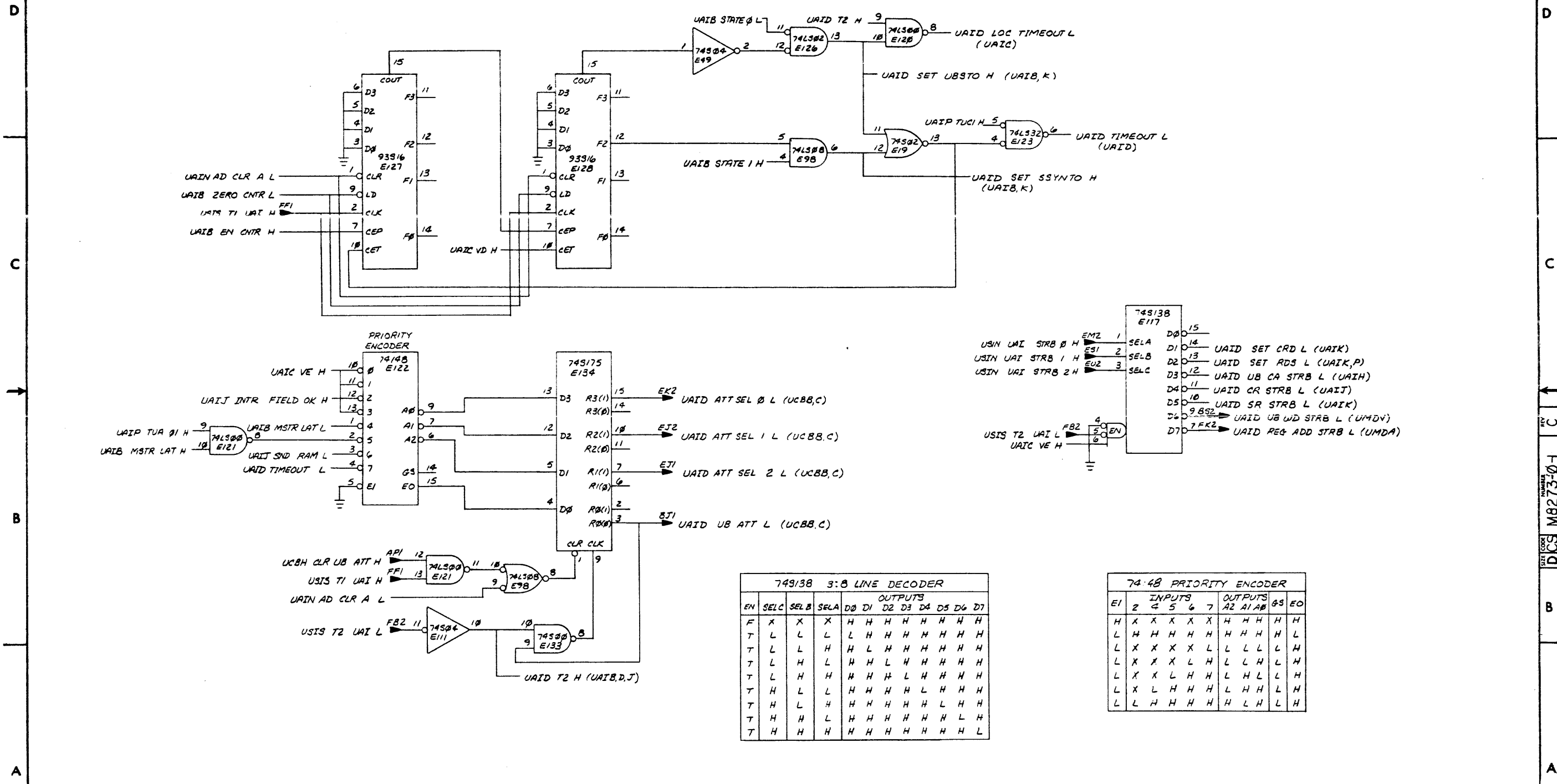
(BUS REQUEST LOGIC) (SLOT 4)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		U.B.A. ADDRESS AND INTERRUPT CONT. (UAIC)		SIZE CODE	NUMBER		REV.
		DCS M8273-0-1			M8273-0-1		C
SCALE	SHEET 7 OF 17			DIST.			

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

8 7 6 5 4 3 2 1



749138 3:8 LINE DECODER

EN	SELC	SELB	SCLA	D0	D1	D2	D3	D4	D5	D6	D7
F	X	X	X	H	H	H	H	H	H	H	H
T	L	L	L	L	H	H	H	H	H	H	H
T	L	L	H	H	L	H	H	H	H	H	H
T	L	H	L	H	H	L	H	H	H	H	H
T	L	H	H	H	H	L	H	H	H	H	H
T	H	L	L	H	H	H	L	H	H	H	H
T	H	L	H	H	H	H	L	H	H	H	H
T	H	H	L	H	H	H	H	L	H	H	H
T	H	H	H	H	H	H	H	L	H	H	H

74:48 PRIORITY ENCODER

EI	2	4	5	6	7	A2	A1	A0	0S	EO
H	X	X	X	X	X	H	H	H	H	H
L	H	H	H	H	H	H	H	H	H	L
L	X	X	X	X	L	L	L	L	L	H
L	X	X	X	L	H	L	L	H	L	H
L	X	X	L	H	H	L	H	L	L	H
L	X	L	H	H	H	L	H	H	L	H
L	L	H	H	H	H	H	L	H	L	H

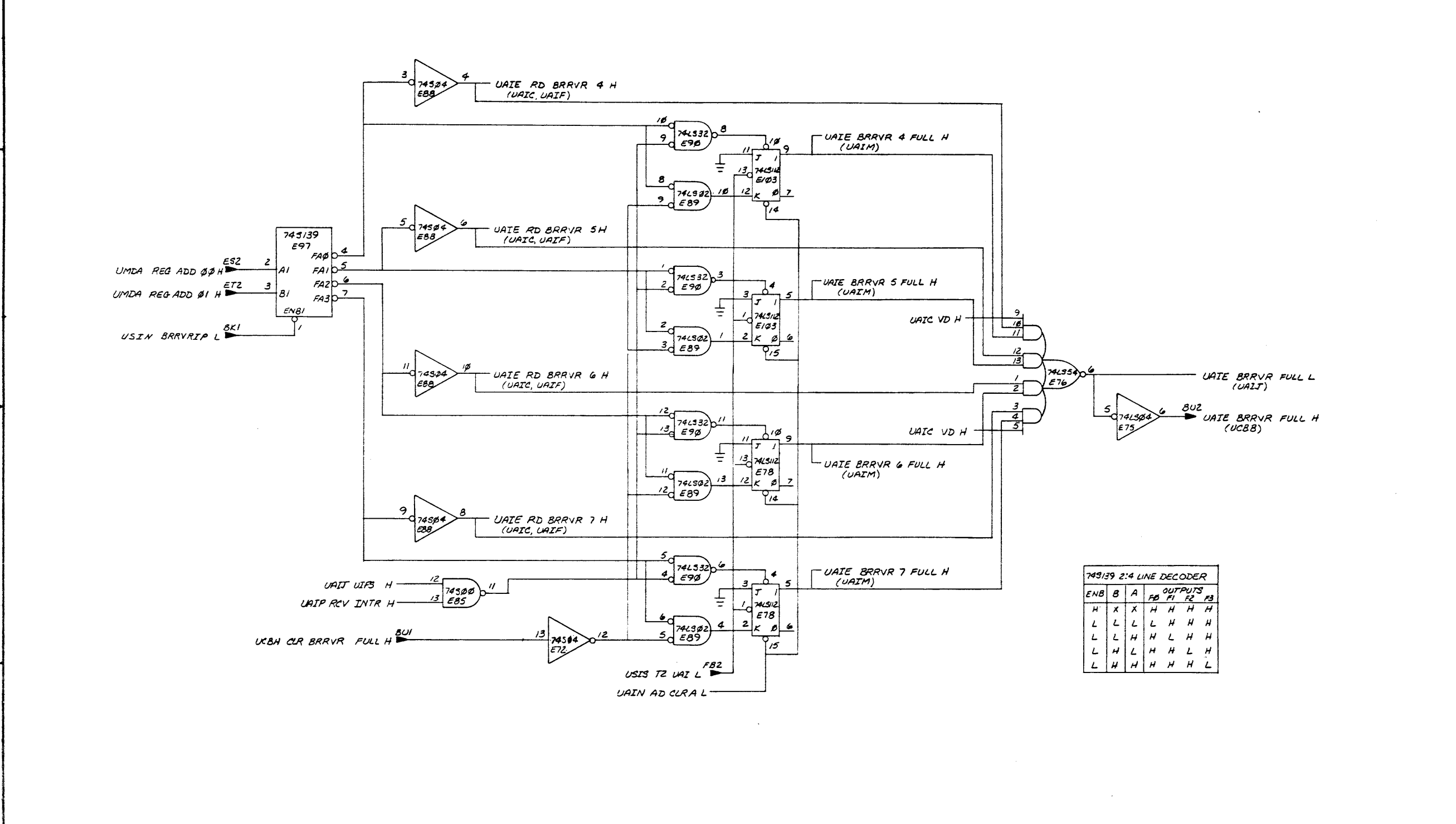
REVISIONS

CHK	CHANGE NO.	REV.

DCS M8273-0-1

8 7 6 5 4 3 2 1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

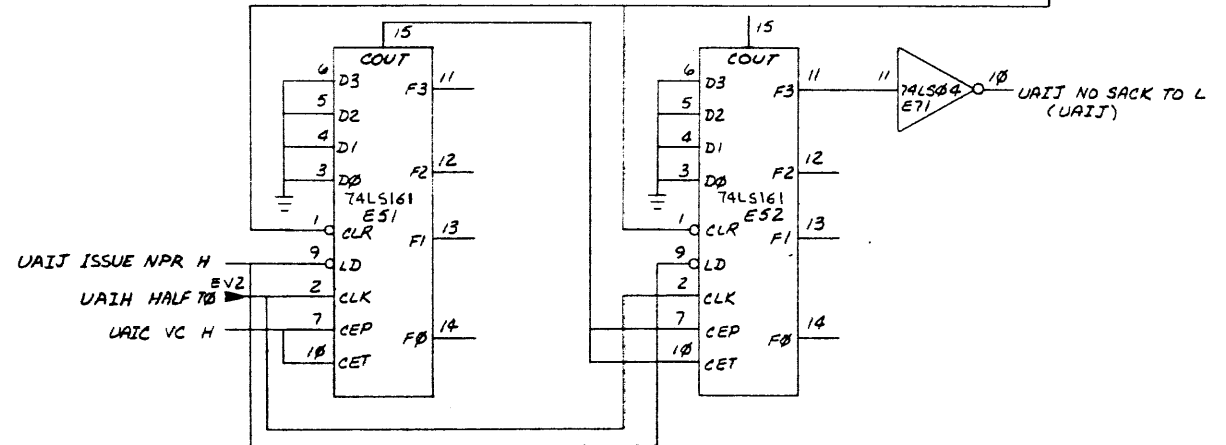
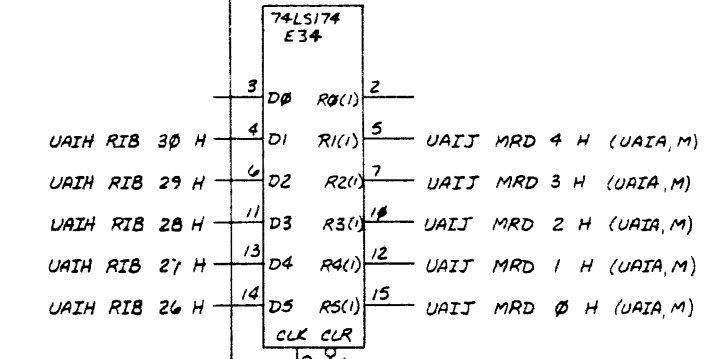
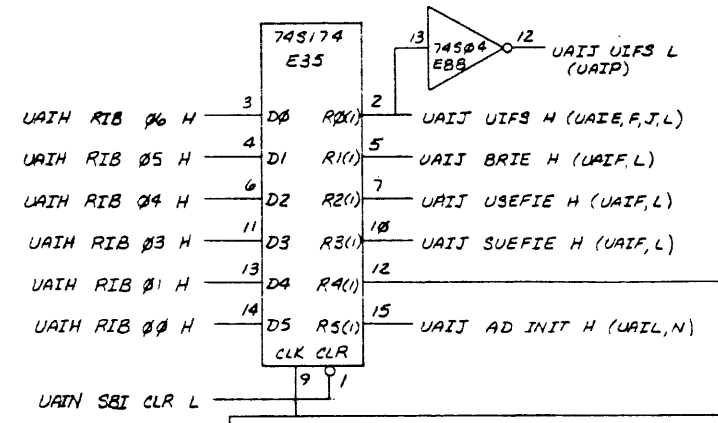
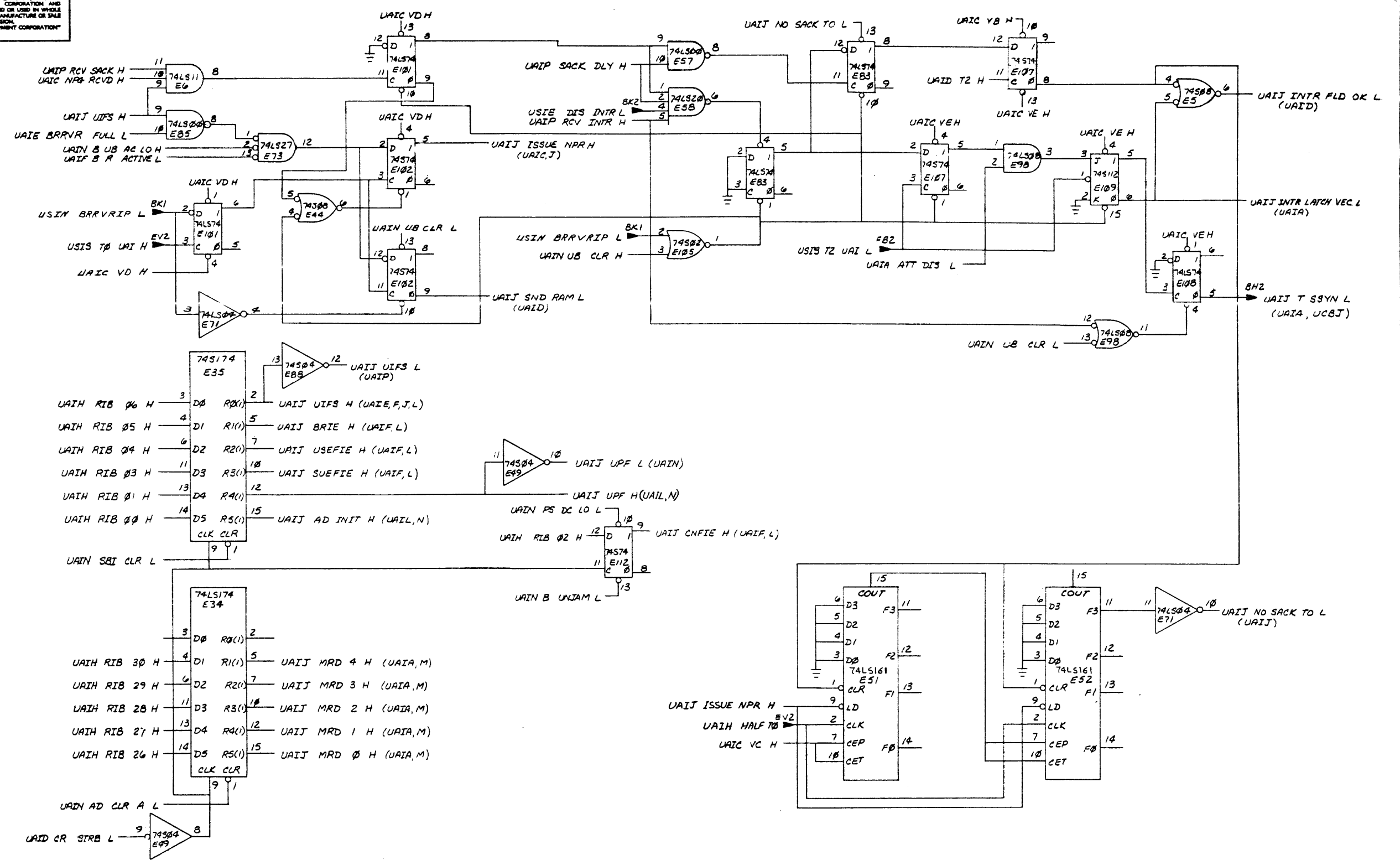


74S139 2:4 LINE DECODER

ENB	B	A	OUTPUTS			
			F0	F1	F2	F3
H	X	X	H	H	H	H
L	L	L	L	H	H	H
L	L	H	H	L	H	H
L	H	L	H	H	L	H
L	H	H	H	H	H	L

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

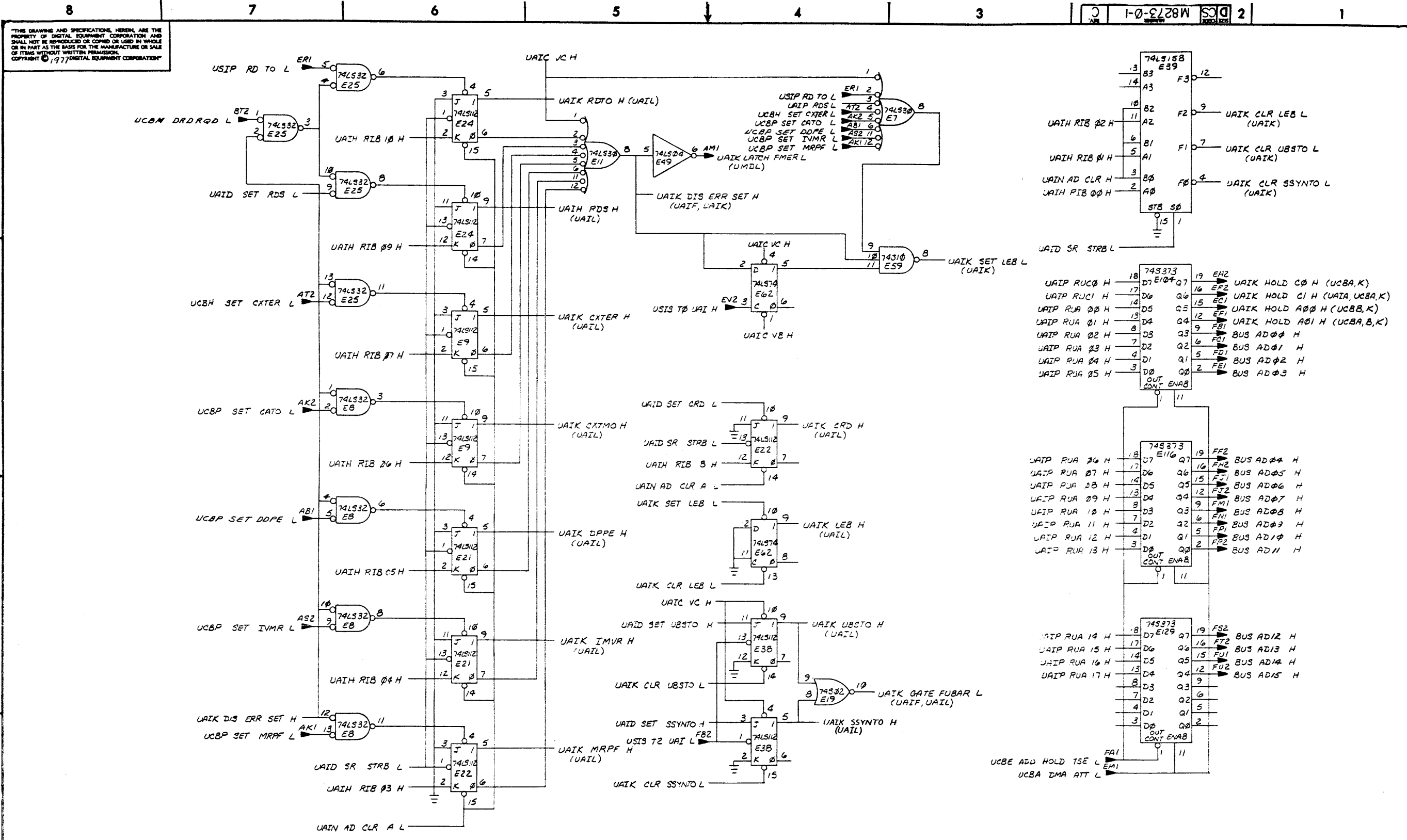
D
C
B
A



REVISIONS		
CHK	CHANGE NO.	REV.

(SBI CONTROL REG & INTERRUPT FIELDING LOGIC) (SLOT 4)

TITLE	UAI ADDRESS AND INTERRUPT CONT. (UAI)	SIZE CODE	DCS	NUMBER	M8273-0-1	REV.	C
SCALE	SHEET 12 OF 17		DIST.				



THE DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977

1-0-2/28W DCS 2

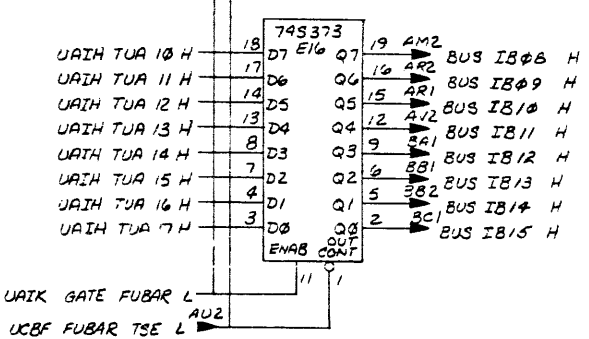
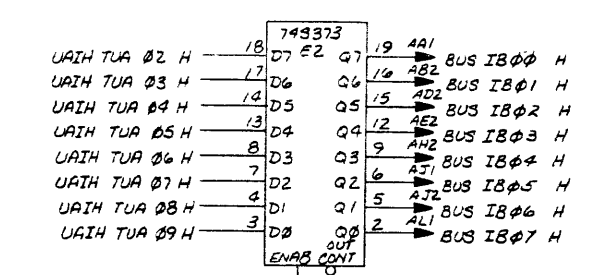
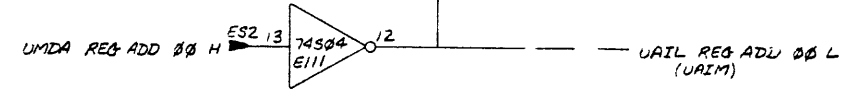
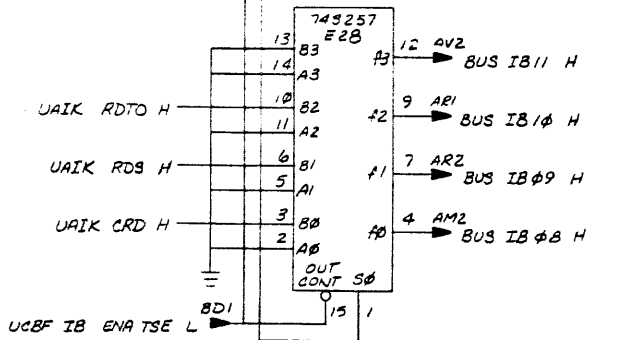
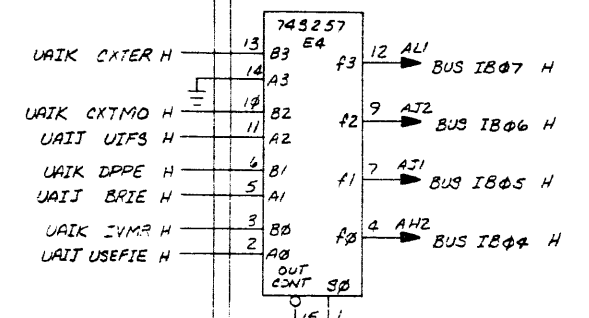
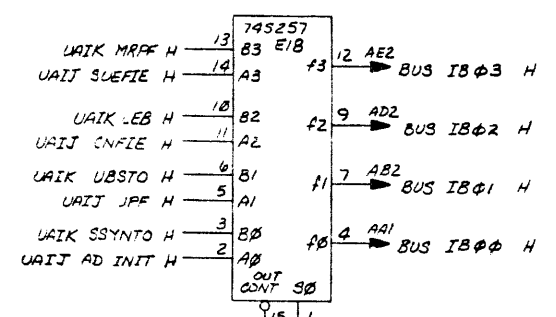
REVISIONS		
CHK	CHANGE NO.	REV.

(UNIBUS ADDRESS HOLD & SBI STATUS REG) (SLOT 4)

TITLE	U.A. ADDRESS AND INTERRUPT CONT (UAIC)	SIZE CODE	DCS	NUMBER	M8273-0-1	REV.	C
SCALE	+	SHEET	13 OF 17	DIST.			

DCS M8273-0-1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION



745257 2:1 MUX

STRB	Q0	OUTPUT
H	X	Z
L	L	A → F
L	H	B → F

REVISIONS		
CHK	CHANGE NO.	REV.

(INT. BUS OUTPUT MUX φφ-11 & FAILED UNIBUS ADDRESS REG (FUBAR))

(SLOT 4)

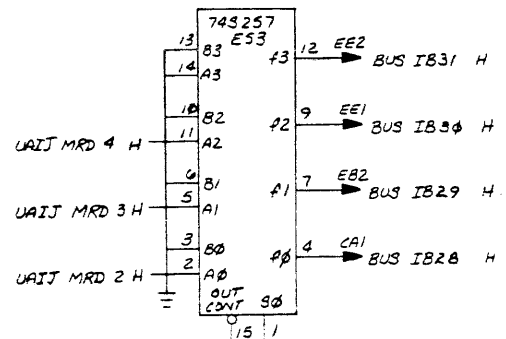
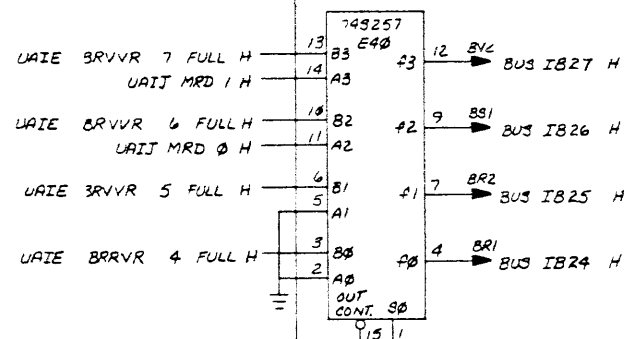
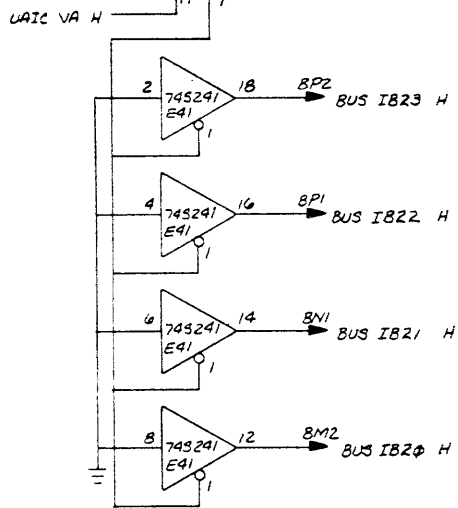
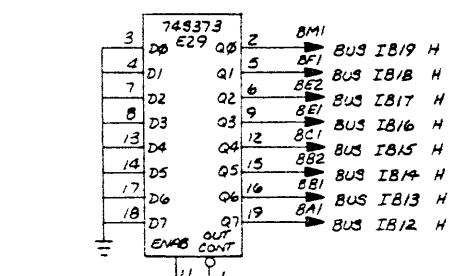
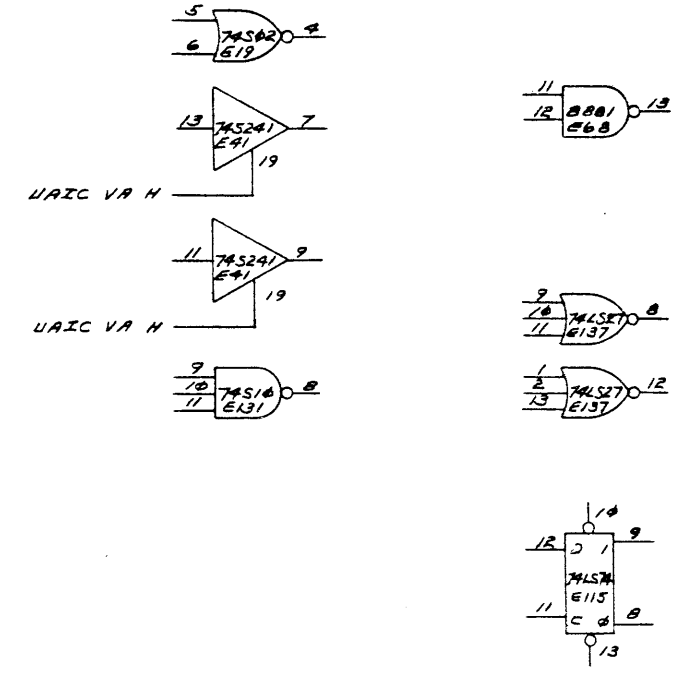
TITLE	U.B.A. ADDRESS AND INTERRUPT CONT. (UAIL)	SIZE/COOD	D/CS	NUMBER	M8273-0-1	REV.	C
SCALE	→	SHEET	14 OF 17	DIST.			

DIGITAL EQUIPMENT CORPORATION
M8273-0-1

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

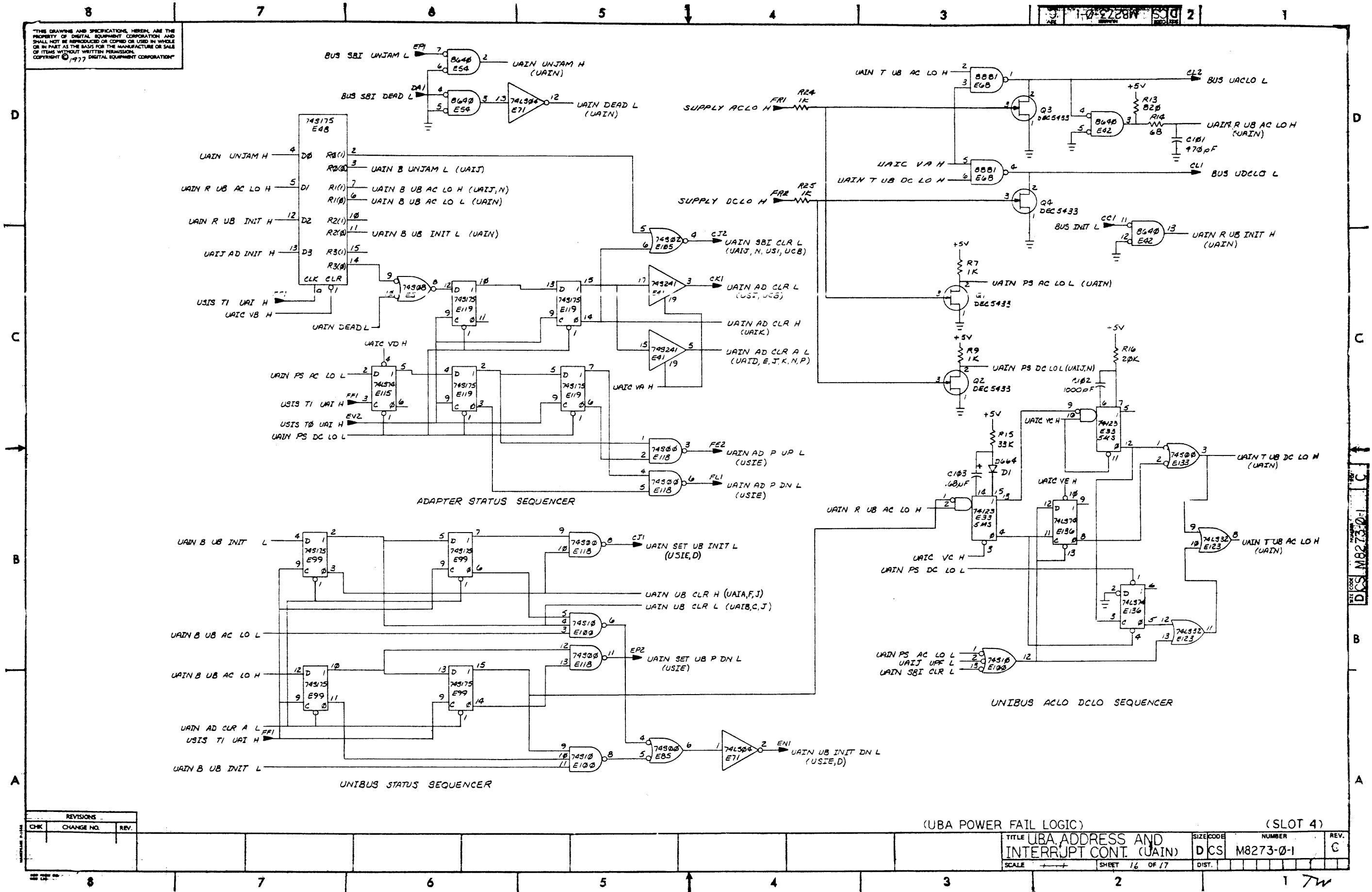
D
C
B
A

SPARE GATES



REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

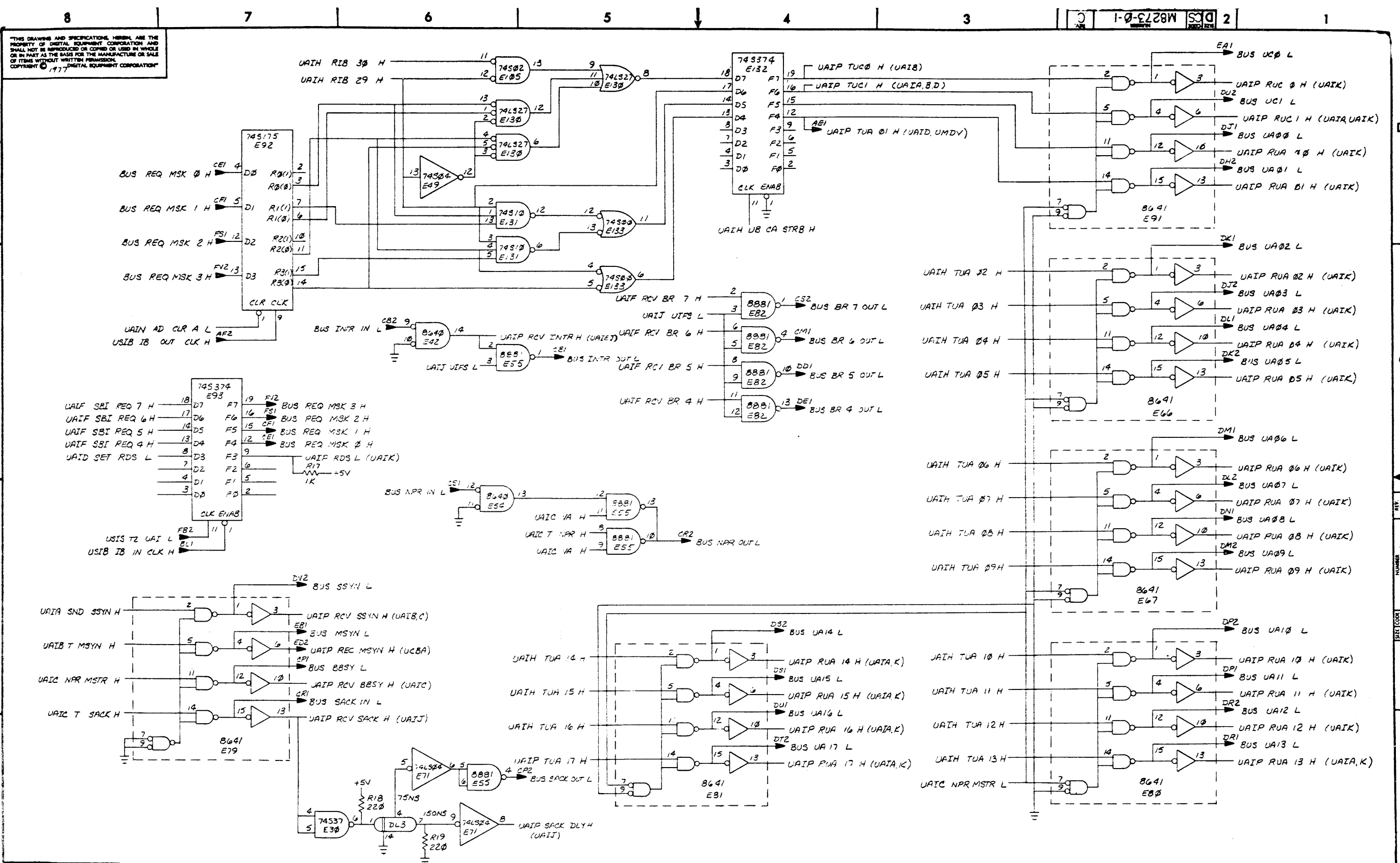


REVISIONS		
CHK	CHANGE NO.	REV.

(UBA POWER FAIL LOGIC) (SLOT 4)

TITLE	UBA ADDRESS AND INTERRUPT CONT. (UAIN)	SIZE/COO	DCS	NUMBER	M8273-0-1	REV.	C
SCALE		SHEET	16	OF	17	DIST.	

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977



REVISIONS		
CHK	CHANGE NO.	REV.

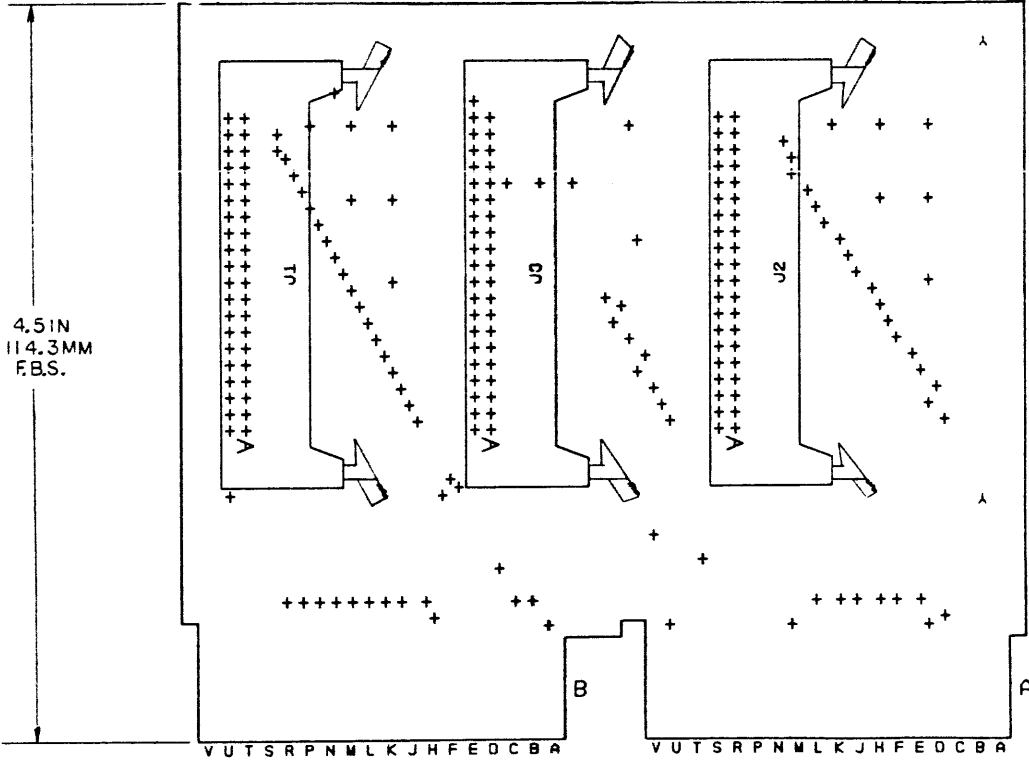
(A00, 01 & C0,1 ENCODE & UNIBUS TRANSCIVERS)

(SLOT 4)

TITLE	U.B.A. ADDRESS AND INTERRUPT CONT. (UAIP)	SIZE CODE	DCS	NUMBER	M8273-0-1	REV.	C
SCALE	+	SHEET	17 OF 17	DIST.			

COMPONENT SIDE VIEW

THIS DRAWING AND ANY INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN ANY MANNER OR IN ANY MEDIUM WITHOUT THE EXPRESS WRITTEN PERMISSION OF DIGITAL EQUIPMENT CORPORATION.



ETCH REV.	B	SIGNATURES		DATE	digital	TITLE	UNIBUS PADDLE CARD	SIZE	CODE	NUMBER	REV
P.C. DESIGN DATA BASE REV.	B	DRM.									
		CHK'D.									
		ENG.									
		PROJ. ENG.									
		PRCO.									
		SCALE	2/1								
		SHT.	1 OF 3								
		NEXT HIGHER ASSY.		B-DD-M9042-0							

NOTES:

CHG	NO	REV

8

7

6

5

4

3

1

REV. A
NUMBER M9042-0-0
DUA

THE DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

D
C
B
A

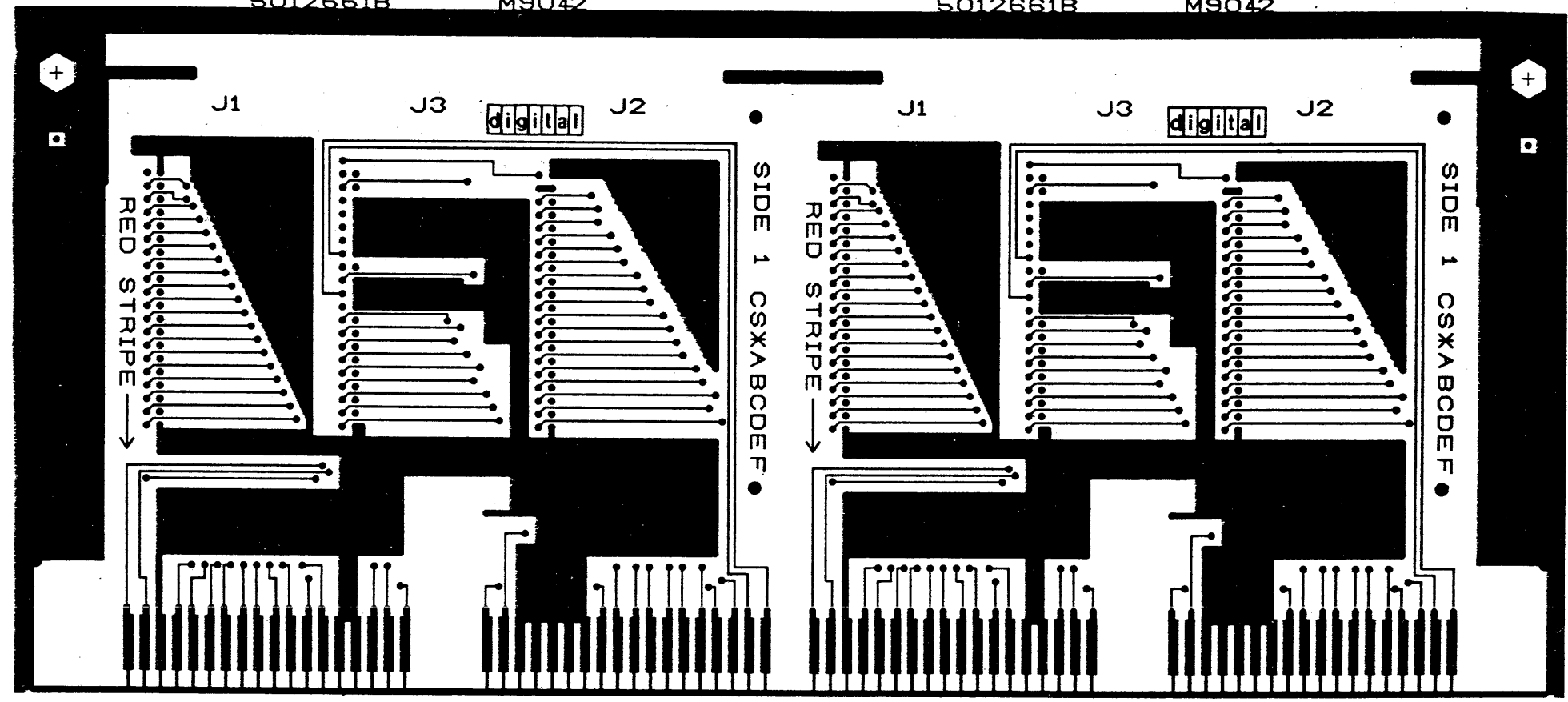
D
C
B
A

5012661B

M9042

5012661B

M9042



J1

J3

digital

J2

SIDE 1 CSKXABDEF

J1

J3

digital

J2

SIDE 1 CSKXABDEF

RED STRIPE

RED STRIPE

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UNIBUS PADDLE CARD	SIZE CODE	DUA	NUMBER	M9042-0-0	REV.	A
SCALE	2-1	SHEET	2 OF 3	DIST.			

8

7

6

5

4

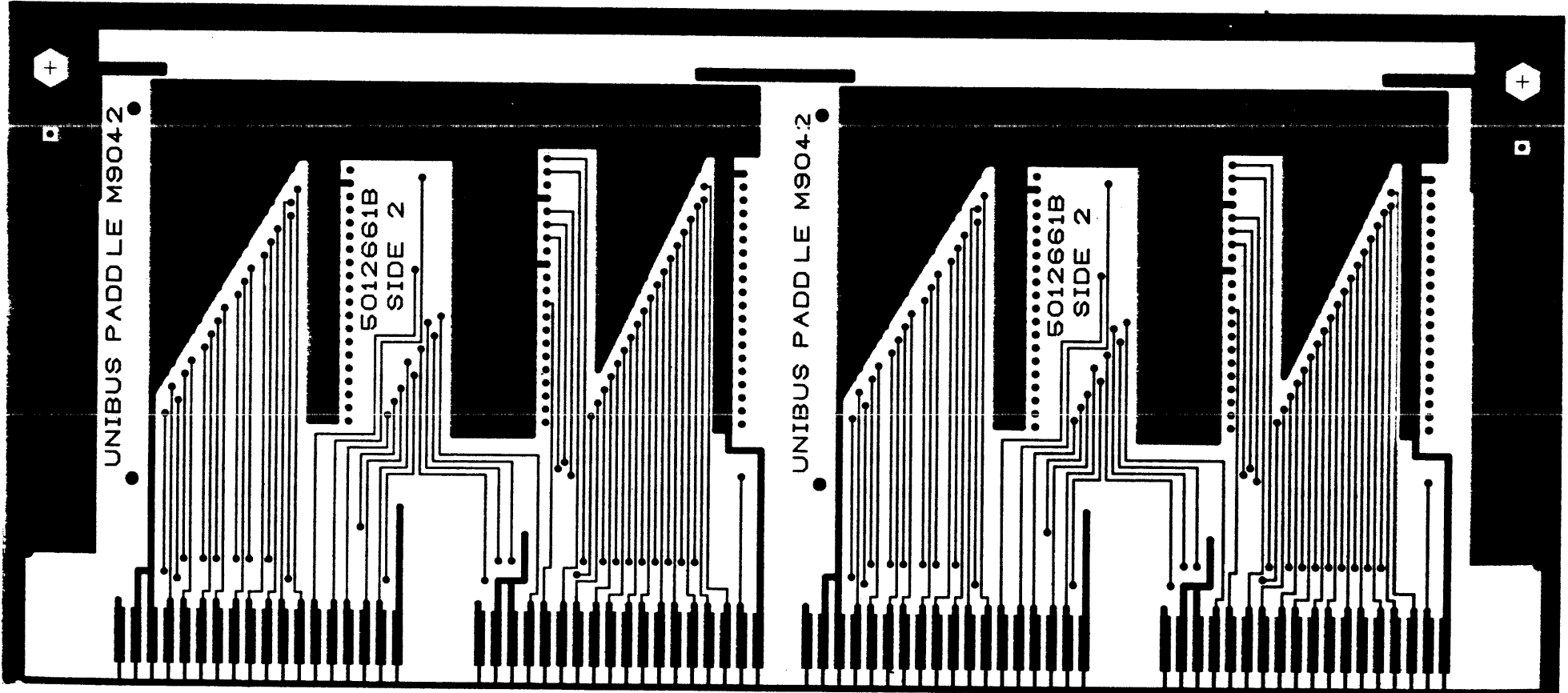
3

2

1

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

SIZE CODE D UA NUMBER 0-0-2606W REV. 2



D
C
B
A

REVISIONS		
CHK	CHANGE NO.	REV.

8	7	6	5	4	3	2	1	TITLE UNIBUS PADDLE CARD	SIZE CODE D UA	NUMBER M9042-0-0	REV. A
SCALE 2-1						SHEET 3 OF 3		DIST.			

SIZE CODE D UA NUMBER M9042-0-0 REV. A

DIGITAL EQUIPMENT CORPORATION PARTS LIST

MADE BY DATE	D.J. SIREEN 22 NOV 76	CHECKED DATE	G. GIDDINGS 27 DEC 76
ENG DATE	B. FLAHIVE <i>R. Hall</i>	PROD DATE	<i>Mike Tuzella</i> 7-5-77

QUANTITY / VARIATION

NOTES:

ETCH REV. B
CS REV. A

REF DESIGNATION

ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M9042-0-0										
1	D-MD-5012661-0-0	5012661	ETCHED BOARD	1										
2		1209941-02	CONNECTOR 40 PIN	3										
3		12 09941-03	LATCH - LEFT	3										
4		12-09941-04	LATCH RIGHT	3										

J1, J2, J3

E.C.O. NO. _____

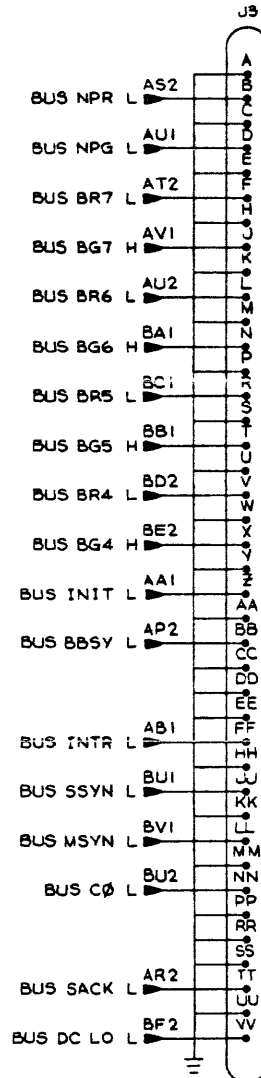
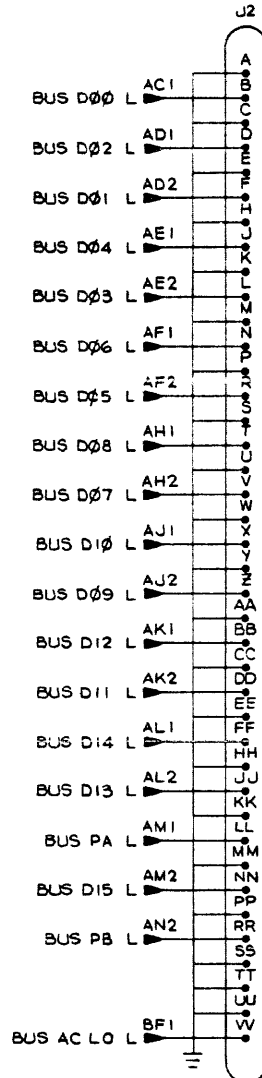
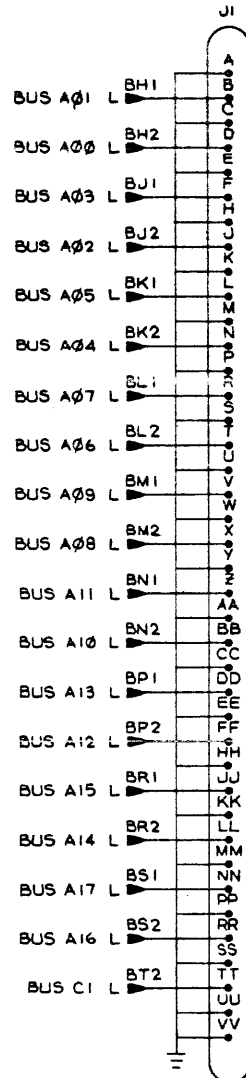
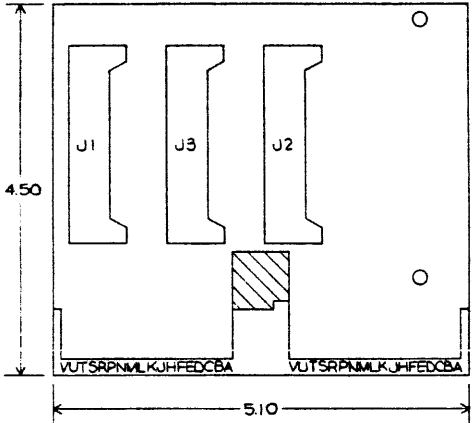
"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1976 DIGITAL EQUIPMENT CORPORATION"	TITLE UNIBUS PADDLE CARD	ASSY NO. D-UA-M9042-0-0	SIZE B	CODE PL	NUMBER M9042-0-0	REV. A
---	--------------------------------	----------------------------	------------------	-------------------	---------------------	-----------

SHEET 1 OF 1

INSERTION PARTS LIST DATA BASE REV

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION

DIGITAL M9042-0-1 2



GND ————
 AB2, AC2, AN1,
 AP1, AR1, AS1,
 AT1, AV2, BB2,
 BC2, BD1, BE1,
 BT1, BV2

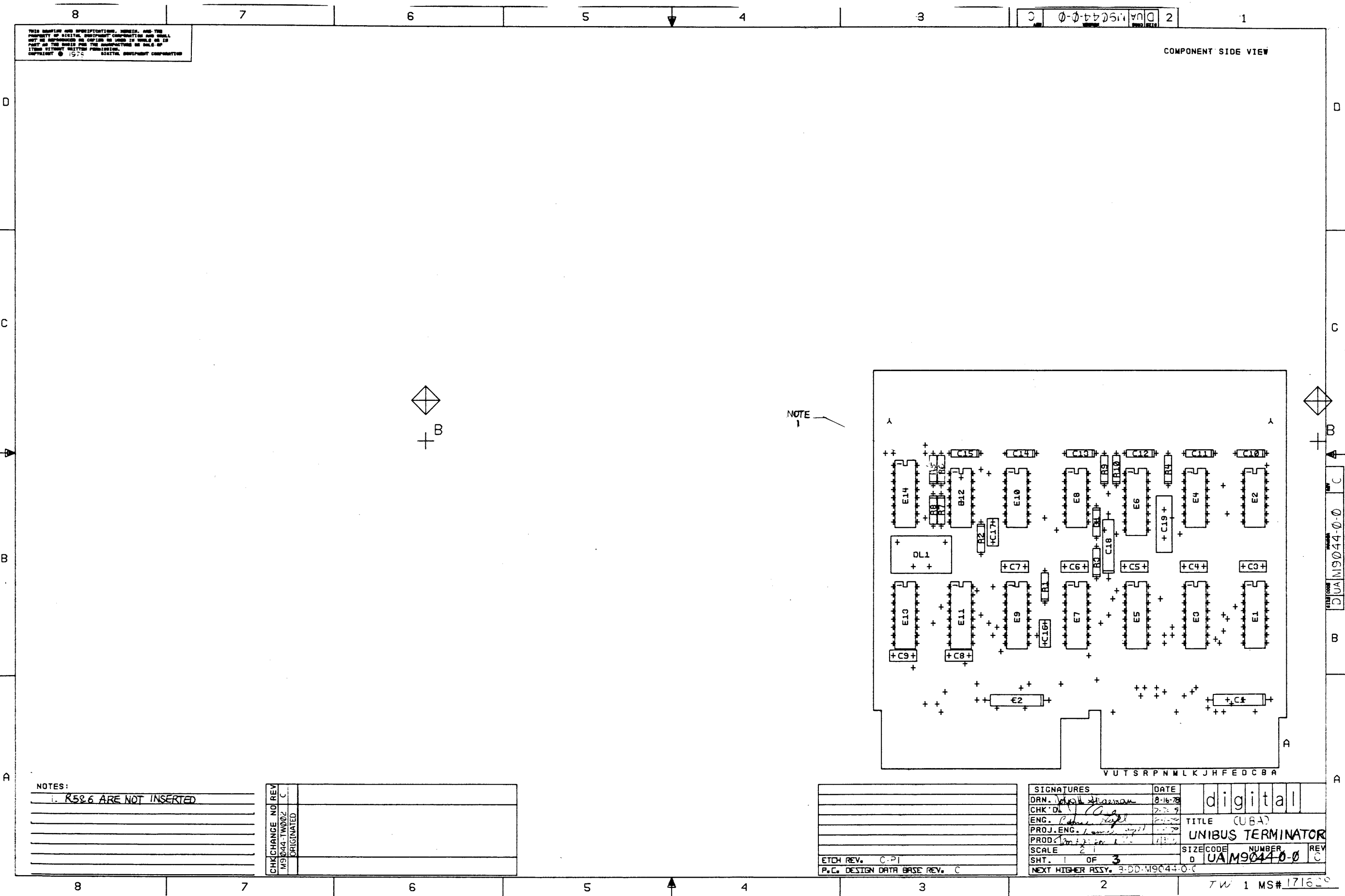
REV.	B
CHK.	ECO 6/01

DRN. 4/2/77	6-12-77	FIRST USED ON	DIGITAL
CHKD. 6/1/77	6-12-77	TITLE	UNIBUS PADDLE CARD
PROJ. ENG. B. H. 6/1/77	6-12-77	SIZE	D CS
PROD. Frank Lee 6/1/77		NUMBER	M9042-0-1
NEXT HIGHER ASSY.		REV.	A
SCALE 1/1		DIST.	
SHEET 1 OF 1			

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF ACICAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART OR THE BASIS FOR THE CONSTRUCTION OF ANY OF ITEMS WITHOUT WRITTEN PERMISSION. ACICAL EQUIPMENT CORPORATION © 1975

0-0-440511100 2

COMPONENT SIDE VIEW



NOTE 1

NOTES:
1. R5&6 ARE NOT INSERTED

CHANGE NO	REV	
M9044-TW002	C	
	ORIGINATED	

ETCH REV.	C-PI
P.C. DESIGN DATA	BASE REV. C

SIGNATURES		DATE	digital
DRN. <i>[Signature]</i>	<i>[Signature]</i>	8-16-78	
CHK'D <i>[Signature]</i>	<i>[Signature]</i>	2-2-79	TITLE (UBA)
ENG. <i>[Signature]</i>	<i>[Signature]</i>	2-2-79	UNIBUS TERMINATOR
PROJ. ENG. <i>[Signature]</i>	<i>[Signature]</i>	11-78	SIZE CODE NUMBER REV
PROD. <i>[Signature]</i>	<i>[Signature]</i>	11-78	D UAM9044-0-0 C
SCALE 2:1	SHT. 1 OF 3	NEXT HIGHER ASSY. 3-00-19044-0-0	

TW 1 MS# 171629

8

7

6

5

4

3

DUA M9044-0-0 2

1

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT ©1978 DIGITAL EQUIPMENT CORPORATION"



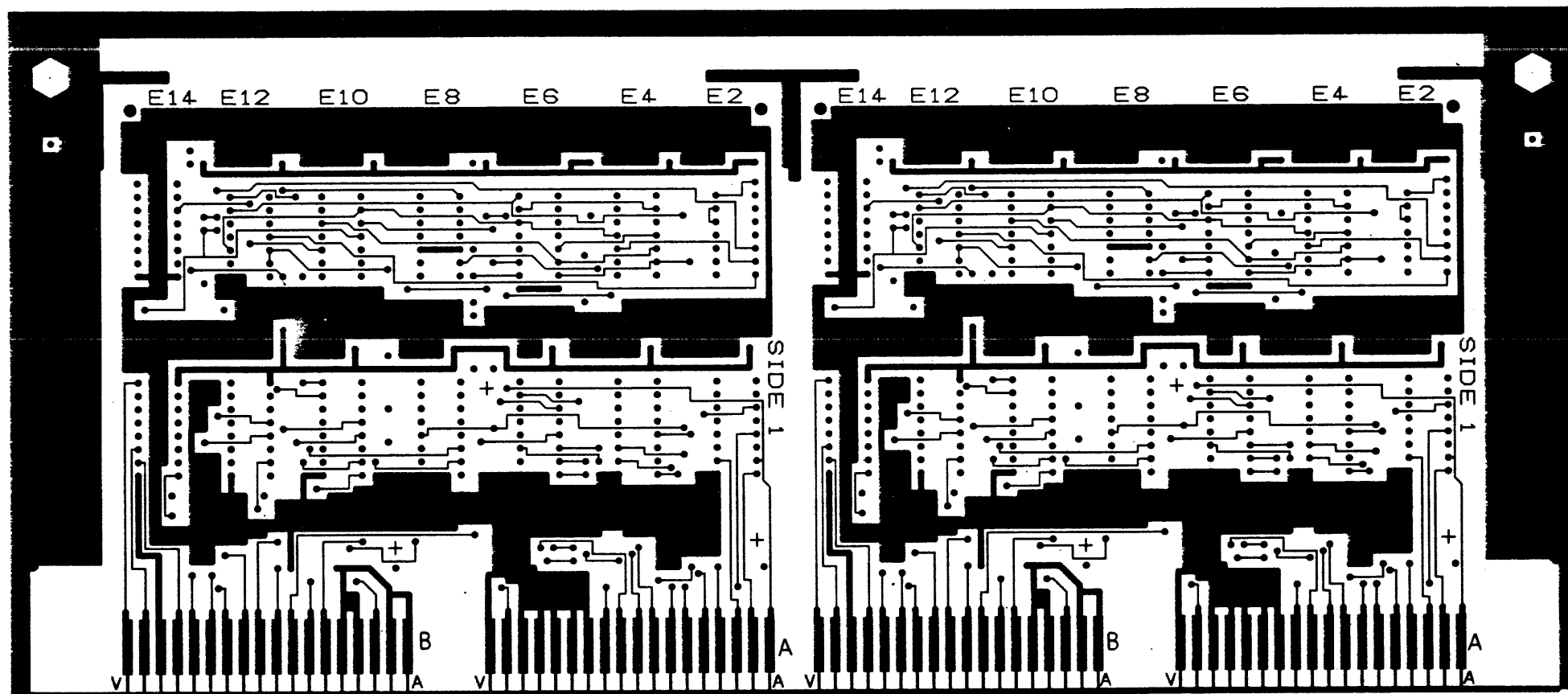
M9044

5012749 CP1



M9044

5012749 CP1



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UNIBUS TERMINATOR	SIZE/CODE	D UA	NUMBER	M9044-0-0	REV.	C
SCALE	2/1	SHEET	2	OF	3	DIST.	

TW 1

8

7

6

5

4

3

2

8

7

6

5

4

3

DUA M9044-0-0 2

1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION

L2

L2

M9044 5012749CP1 UBA UNIBUS TERM

M9044 5012749CP1 UBA UNIBUS TERM

SIDE 2

SIDE 2

A

B

A

B

A

A

A

A

V

V

V

V

DUA M9044-0-0 C

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UNIBUS TERMINATOR	SIZE CODE	D UA	NUMBER	M9044-0-0	REV.	C
SCALE	2/1	SHEET	3	OF	3	DIST.	

TW 1

8

7

6

5

4

3

2

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	REFERENCE DESIGNATOR
1	1		5012749-00	M9044	1	
2	2		1000076-00	39 MFD 10V 10% 150D S.TA	2	C1,C2
3	3		1010274-01	.22 MFD 50V -20+80 Z5U CER	7	C3-C9
4	4		1000043-00	1000.0 MMF 250V 20% Y5F DISC	2	C16,C17
5	5		1012784-00	.047 MFD 50V -20+80 CER	6	C10-C15
6	6		1002431-00	2.2MFD 35V 10% 150S S.TA	1	C18
7	7		1001636-00	2400.0 MMF 100V 5%200PPM DM19S	1	C19
8	8		1100114-00	D 664 GS\75PCB PIV= 25V SP	1	D1
9	9		1300309-00	390 1/4W 5% CC	2	R1,R2
10	10		1301808-00	22 K 1/4W 5% CC	1	R3
11	11		1300496-00	15 1/4W 5% CC	1	R4
12	12		1300250-00	150 1/4W 5% CC	1	R8
13	13		1301972-00	270 1/4W 5% CC	1	R7
14	14		1300295-00	330 1/4W 5% CC	1	R9
15	15		1301401-00	750 1/4W 5% CC	1	R10
16	16		1312628-01	R NETWORK 14-176.5 11-375	7	E1,E7,E9,E3,E5,E11,E13
17	17		1911469-00	DEC 8640 RECEIVER,BUS,QUAD,U	2	E8,E10
18	18		1910532-00	74S00 NAND GATE-QUAD 2INS	1	E12
19	19		1910436-00	DEC 74123 ONE SHOT-DUAL,RETRIG	1	E6
20	20		1912824-00	LS74 FF-D DUAL,EDGE TRIGG	1	E4
21	21		1909705-00	DEC 9881 NAND GATE-QUAD 2IN 0	1	E2
22	22		1609428-00	DELAY= 50NS,0TAPS D0150	1	DL1
23	23		1911116-00	DEC 9837 RECEIVER,BUS,HEX,UN	1	E14

0 NOTE: R5 AND R6 ARE NOT INSERTED.

REVISION HISTORY		BASIC PART NO: M9044		DRN:	J.SHOREMAN	DATE:	23-AUG-78	D I G I T A L			
ENG:	ECO NUMBER	REV	SECTION A OF A	CHK'D:	K.FRIEDGEN	DATE:	2-AUG-79	TITLE		PARTS LIST	
---	INITIAL	C	SECTION VARIATION INDEX					UBA		UNIBUS TERMINATOR	
			[A] 00					DOCUMENT NUMBER			
			[B]	DES.ENG:	B.HALL	DATE:	2-AUG-79	SIZE	CODE	NUMBER	REV
			[C]								
			[D]	RESP.ENG.:	B.HALL	DATE:	2-AUG-79				
			[E]								
			[F]								
			[H]								
			[J]	MFG.ENG.:	B.SIMS	DATE:	2-AUG-79	K	PL	M9044-0-DBP	C
			[K]								
			[L]	ASSEMBLY NUMBER:		TOP DOCUMENT NUMBER:		FILE NAME:		EDIT #	
			[M]	ID-UA-M9044-0-0				M9044.PLS		4	
			[N]								

"THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1979. DIGITAL EQUIPMENT CORPORATION"

TW



THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

CS M9044-0-1 2

REVISIONS	REV.	
CHANGE NO.	REV.	
1	A	1M9044-00001
2	B	1M9044-00001
3	C	1M9044-1M902
4	D	1M9044-1M902
5	E	1M9044-1M902
6	F	1M9044-1M902
7	G	1M9044-1M902
8	H	1M9044-1M902

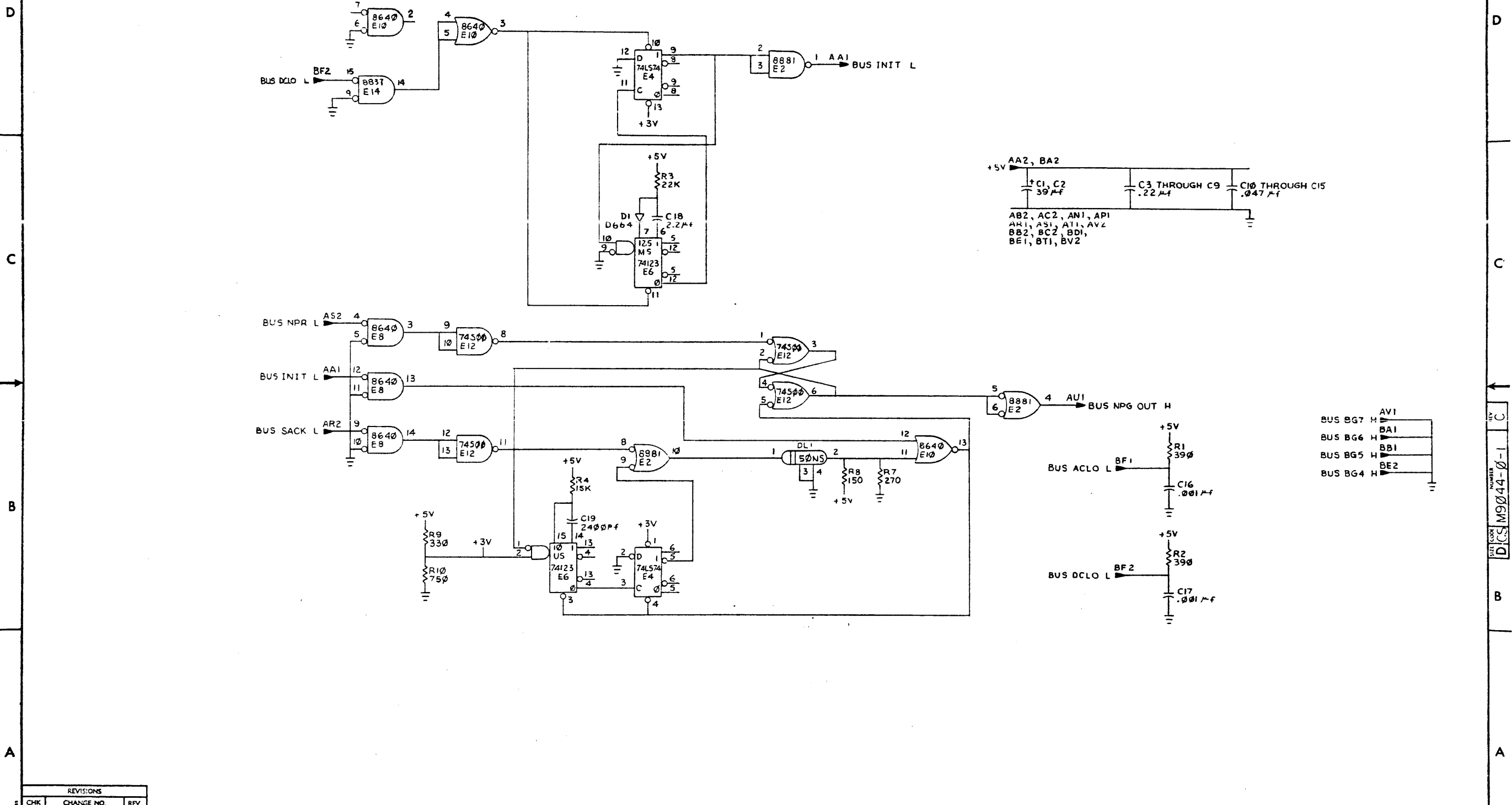
TIMING DIAGRAM		DRN. AF M	5/24	FIRST USED ON	11780	digital
CHK	8/22/77	ENG. B. Hall	6/22/77	TITLE	UBA UNIBUS TERMINATOR	
PROJ. ENG.	B. Hall	6/22/77	PROD.	8/17/77		
NEXT HIGHER ASSY.						
SCALE	1:1	SIZE	D	CODE	CS M9044-0-1	REV. C
SHEET	1 OF 3	DIST.				

REV. C
CS M9044-0-1

REV. B

REV. A

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

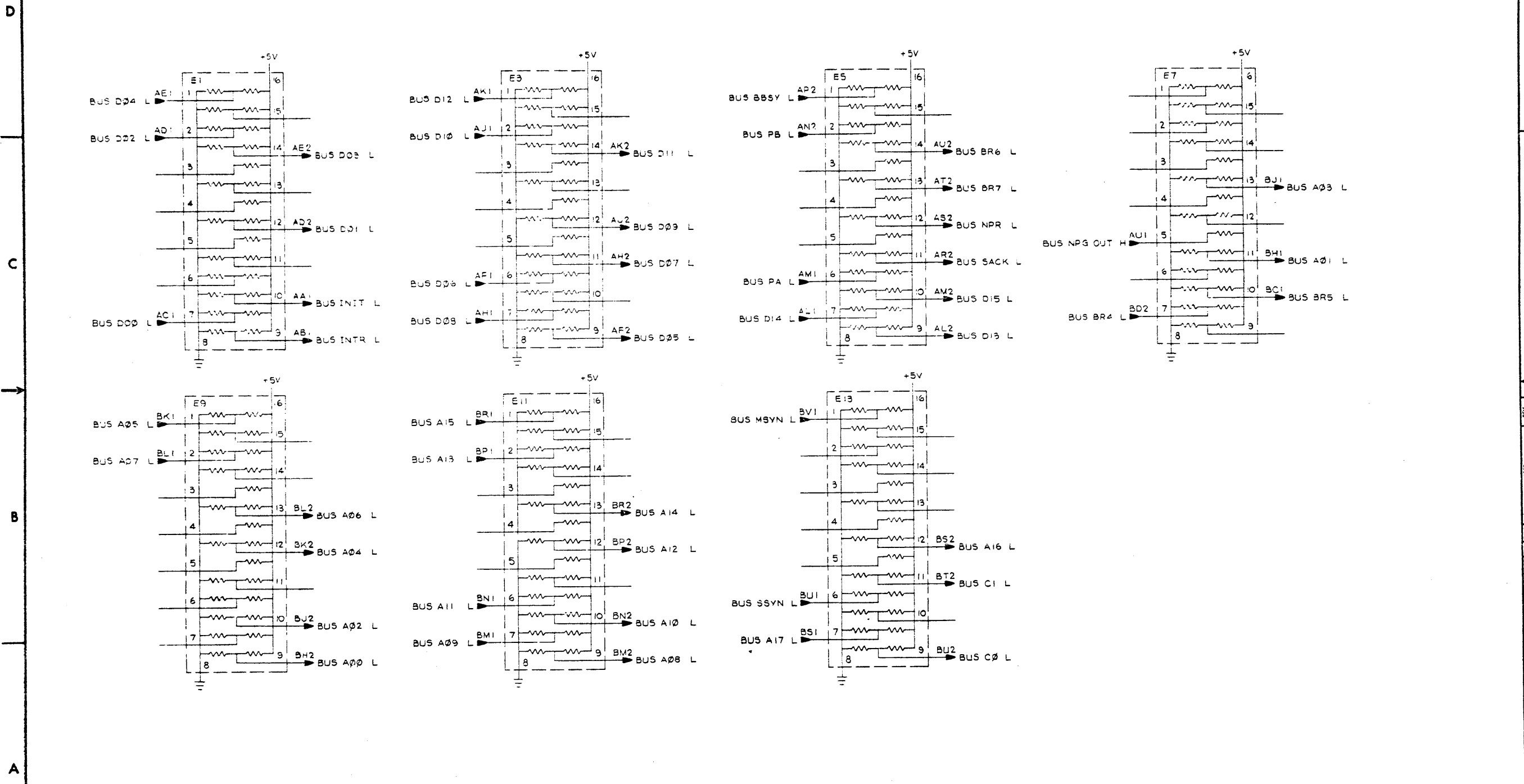


AAZ, BA2
 C1, C2 39µF
 C3 THROUGH C9 .22µF
 C10 THROUGH C15 .047µF
 AB2, AC2, AN1, AP1
 AR1, AS1, AT1, AV2
 BB2, BC2, BD1,
 BE1, BT1, BV2

AV1
 BUS BG7 H
 BA1
 BUS BG6 H
 BB1
 BUS BG5 H
 BE2
 BUS BG4 H

REVISIONS		
CHK	CHANGE NO.	REV.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS INSTRUCTIONS FOR THE MANUFACTURE OR SALE OF EQUIPMENT WITHOUT WRITTEN PERMISSION FROM DIGITAL EQUIPMENT CORPORATION



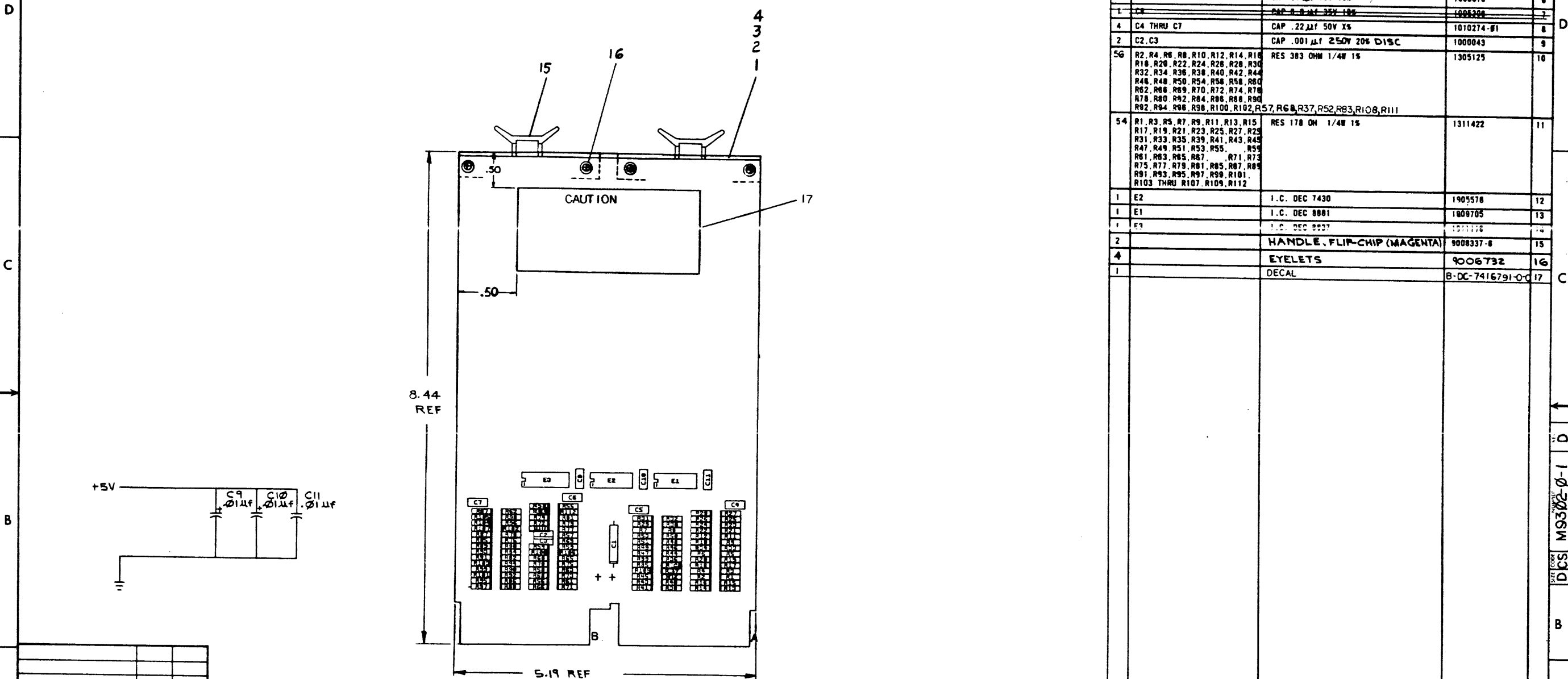
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	URA UNIBUS TERMINATOR	SIZE CODE	D CS	NUMBER	M9044-0-1	REV.	C
SCALE		SHEET	3 OF 3	DIST.			

SIZE CODE DCS NUMBER M9044-0-1 REV. C

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1974, DIGITAL EQUIPMENT CORPORATION.

NOTES:
 1.) THE FOLLOWING REFERENCE DESIGNATIONS ARE NOT USED: C8, R64, AND R110.



IC TYPE	GND	+5V
IC DEC 8837	8	16
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.		

IC PIN LOCATIONS

DRN: <i>[Signature]</i>	DATE: 10/1/74
CHK'D: <i>[Signature]</i>	DATE: 10/2/74
ENG: <i>[Signature]</i>	DATE: 9-25-75
PROJ. ENG: <i>[Signature]</i>	DATE: 9-25-75
PROD. <i>[Signature]</i>	DATE: 3/20/76

REV	CHG	CHANGE NO.	REVISIONS
B		1	MS302-00001
C		2	MS302-00002
D		3	MS302-00003

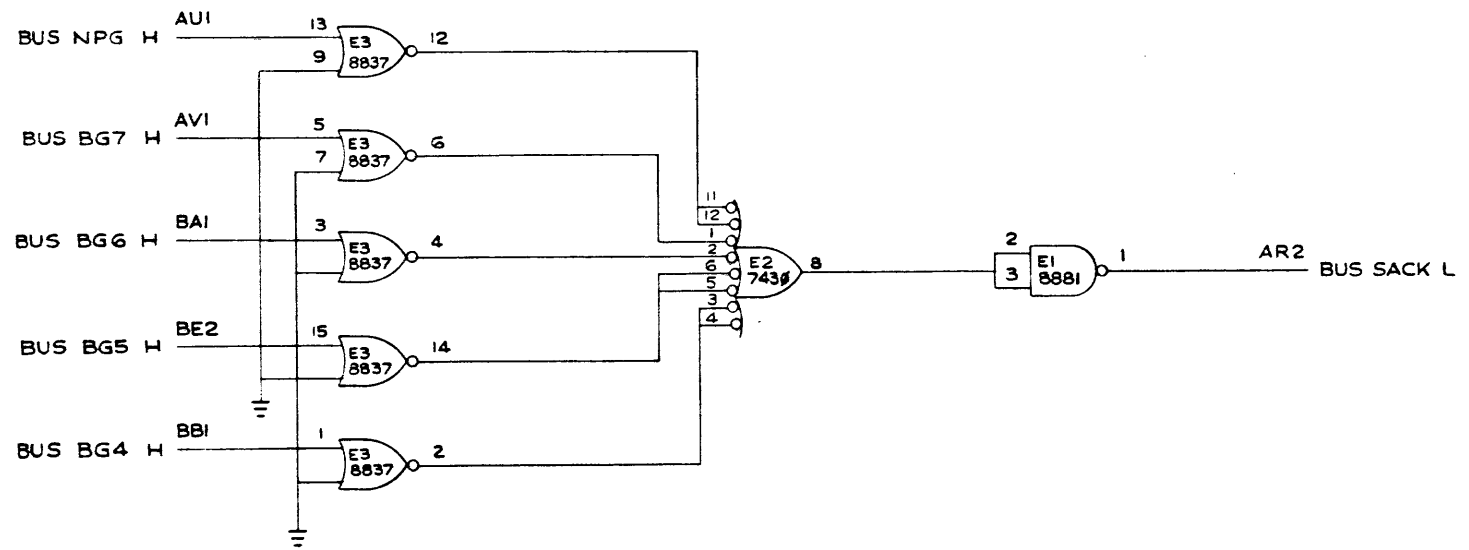
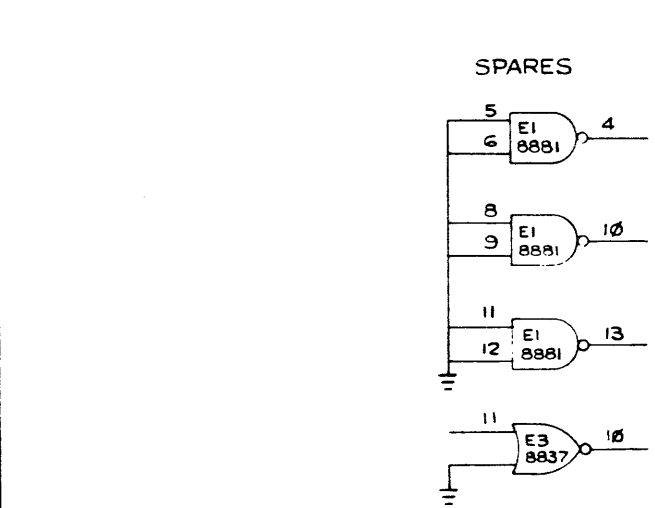
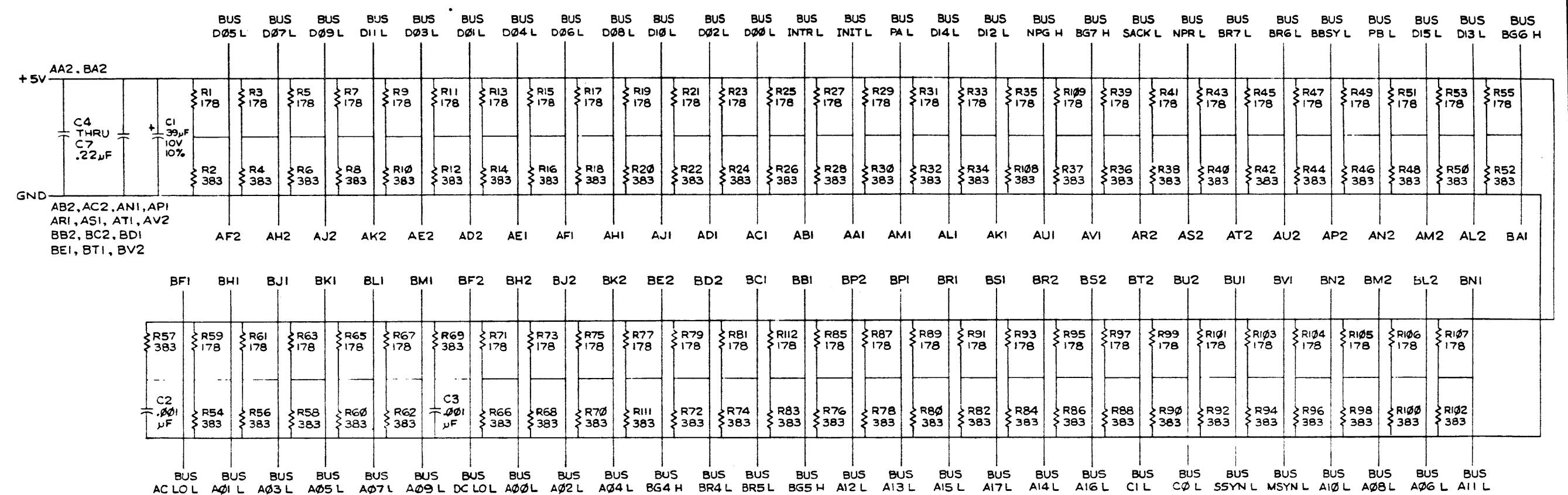
FIRST USED ON OPTION MODEL		PARTS LIST	
ETCH BOARD REV	B	DRN	<i>[Signature]</i>
DATE	10/1/74	CHK'D	<i>[Signature]</i>
DATE	10/2/74	ENG	<i>[Signature]</i>
DATE	9-25-75	PROJ. ENG	<i>[Signature]</i>
DATE	9-25-75	PROD.	<i>[Signature]</i>
DATE	3/20/76	NEXT HIGHER ASSY	

digital EQUIPMENT CORPORATION
 TITLE: UNIBUS TERMINATOR
 SCALE: 1 OF 2
 SHEET: 1 OF 2
 SIZE/CODE: DCS M9302-0-1
 NUMBER: M9302-0-1
 REV: D

REF	DESCRIPTION	PART NO.	ITEM NO.
REF	X-Y HOLE COORDINATE HOLE LOCATION	K-CO-M9302-0-4	1
REF	ASSY/DRILLING HOLE LAYOUT	D-AH-M9302-0-5	2
REF	MODULE ECO HISTORY	B-MH-M9302-0-8	3
1	ETCHED CIRCUIT BOARD	5871311	4
3	C9, C10, C11	CAP .01 uf 100V 20% DISC	1001810-01
1	C1	CAP 39 uf 10V 10%	1000076
1	C4	CAP .22 uf 50V X5	1000308
4	C4 THRU C7	CAP .22 uf 50V X5	1010274-01
2	C2, C3	CAP .001 uf 250V 20% DISC	1000043
56	R2, R4, R6, R8, R10, R12, R14, R16, R18, R20, R22, R24, R26, R28, R30, R32, R34, R36, R38, R40, R42, R44, R46, R48, R50, R54, R56, R58, R60, R62, R66, R69, R70, R72, R74, R76, R78, R80, R82, R84, R86, R88, R90, R92, R94, R96, R98, R100, R102, R57, R63, R37, R52, R83, R108, R111	RES 383 OHM 1/4W 1%	1305125
54	R1, R3, R5, R7, R9, R11, R13, R15, R17, R19, R21, R23, R25, R27, R29, R31, R33, R35, R39, R41, R43, R45, R47, R49, R51, R53, R55, R59, R61, R63, R65, R67, R71, R73, R75, R77, R79, R81, R85, R87, R89, R91, R93, R95, R97, R99, R101, R103 THRU R107, R109, R112	RES 178 OHM 1/4W 1%	1311422
1	E2	I.C. DEC 7430	1905578
1	E1	I.C. DEC 8881	1809705
1	E3	I.C. DEC 8837	1511178
2		HANDLE, FLIP-CHIP (MAGENTA)	9008337-8
4		EYELETS	9006732
1		DECAL	B-DC-7416791-0-17

DCS M9302-0-1 D
 DCS M9302-0-1 D

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1975 DIGITAL EQUIPMENT CORPORATION

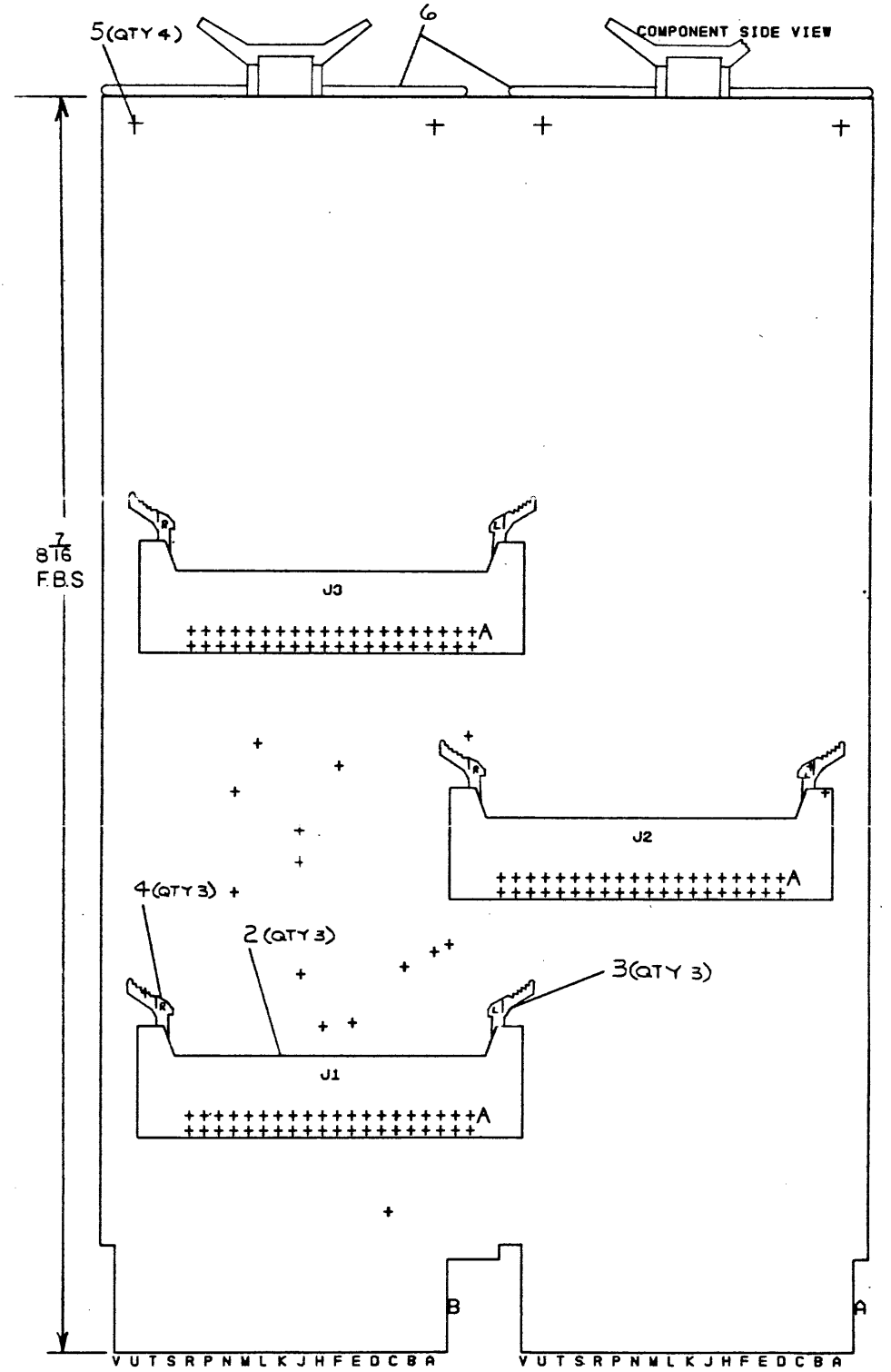


REVISIONS		
CHK	CHANGE NO	REV

TITLE	UNIBUS TERMINATOR	SIZE CODE	DCS	NUMBER	M9302-0-1	REV.	D
SCALE	---	SHEET	2	OF	2	DIST	

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. DIGITAL EQUIPMENT CORPORATION © 1977

1 2 3 4 5 6 7 8
 DUA M9014-0-0 2



DUA M9014-0-0

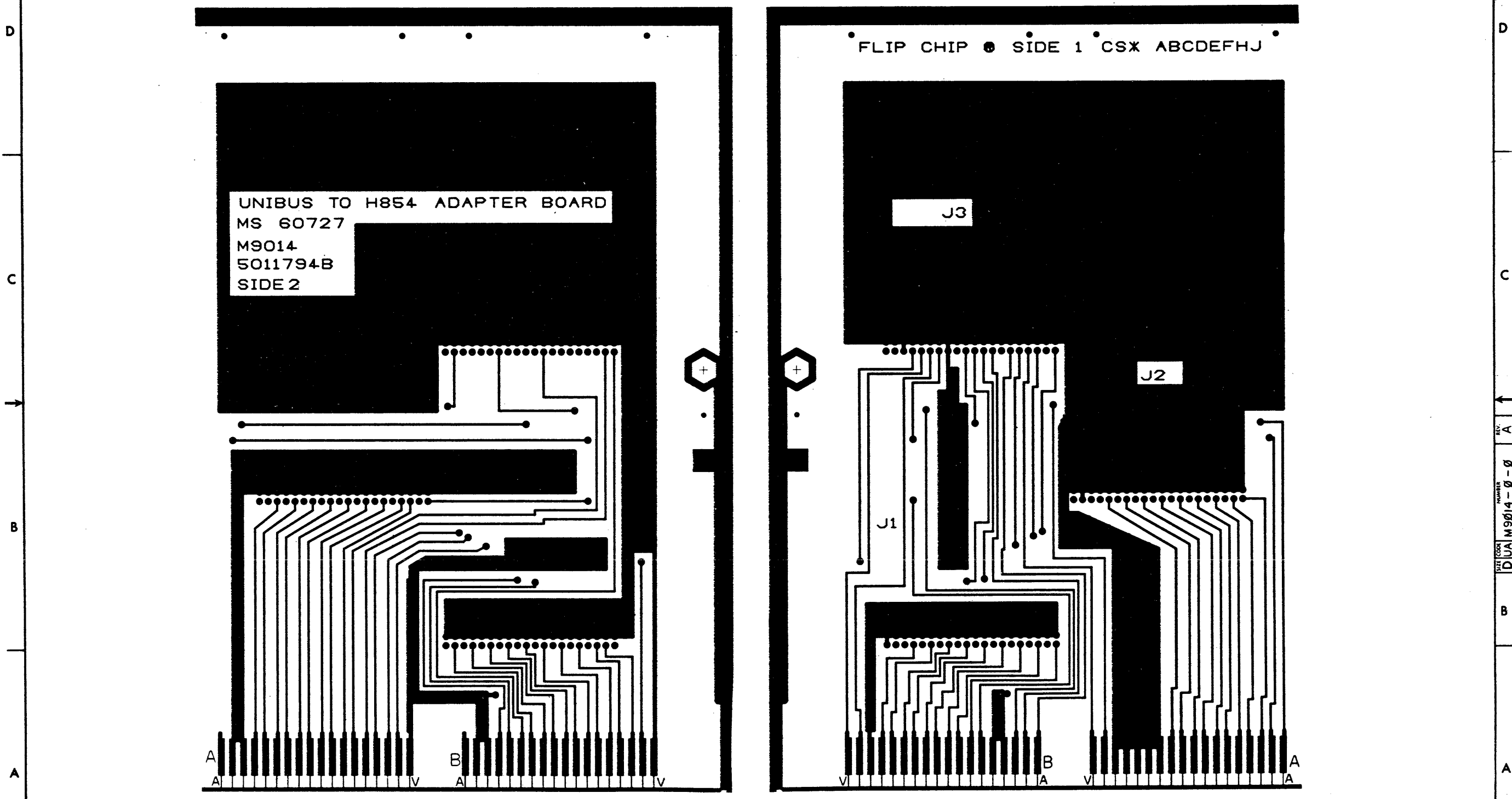
NOTES:

CH	NO	REV

SIGNATURES	DATE	digital
DRN. <i>[Signature]</i>	9-5-75	
CHK'D. <i>[Signature]</i>	9-5-75	
ENG. <i>[Signature]</i>	10-20-75	TITLE UNIBUS TO H854
PROJ. ENG. <i>[Signature]</i>	10-20-75	ADAPTER BOARD
PROD. <i>[Signature]</i>	10-20-75	SCALE 2/1
SHT. 1 OF 2		SIZE CODE NUMBER REV
ETCH REV B	FIRST USED ON	DUA M9014-0-0 A

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION

MS 60727 M9014 5011794B



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	UNIBUS TO H854 ADAPTER BOARD	SIZE CODE	DUA	NUMBER	M9014 - 0 - 0	REV.	A
SCALE	2/1	SHEET	2	OF	2	DIST.	

SIZE CODE: DUA M9014 - 0 - 0
 NUMBER: DUA M9014 - 0 - 0
 REV: A

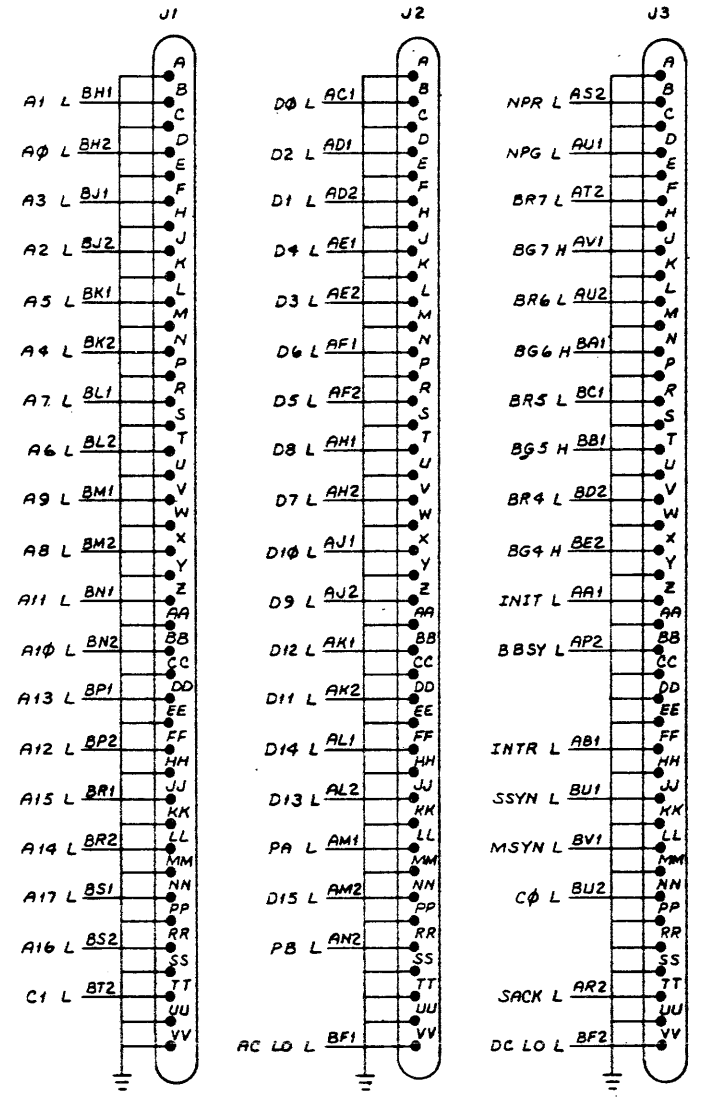
DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES:							
MADE BY <i>X. Lamacke</i> DATE <i>21/FEB/77</i>		CHECKED <i>RW Counter</i> DATE <i>21 Feb 77</i>		SECTION 1																	
ENG <i>R. M. Olson</i> DATE <i>1 MAR 77</i>		PROD DATE <i>W. Emly 1 MAR 77</i>		ISSUED SECTION 1																	
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION																	REF DESIGNATION	
1		5011794	ETCHED CIRCUIT BOARD	1																	
2		1209941-02	CONN., 40 PIN	3																J1, J2, J3	
3		1209941-03	LATCH, LEFT	3																	
4		1209941-04	LATCH, RIGHT	3																	
5		9006732	EYELETS	4																	
6		9008337-06	HANDLE, FLIP CHIP, MAGENTA	2																	

E.C.O. NO. "THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977 DIGITAL EQUIPMENT CORPORATION"	TITLE UNIBUS TO H854 ADAPTER BOARD	ASSY NO. D-UA-M9Ø14-Ø-Ø SHEET 1 OF 1	SIZE B	CODE PL	NUMBER M9Ø14-Ø-Ø	REV. A
INSERTION PARTS LIST DATA BASE REV						

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION.

D
C
B
A

D
C
B
A



AB2 AC2 AN1
AP1 AR1 AS1
AT1 AV2 BB2
BC2 BD1 BE1
BT1 BV2

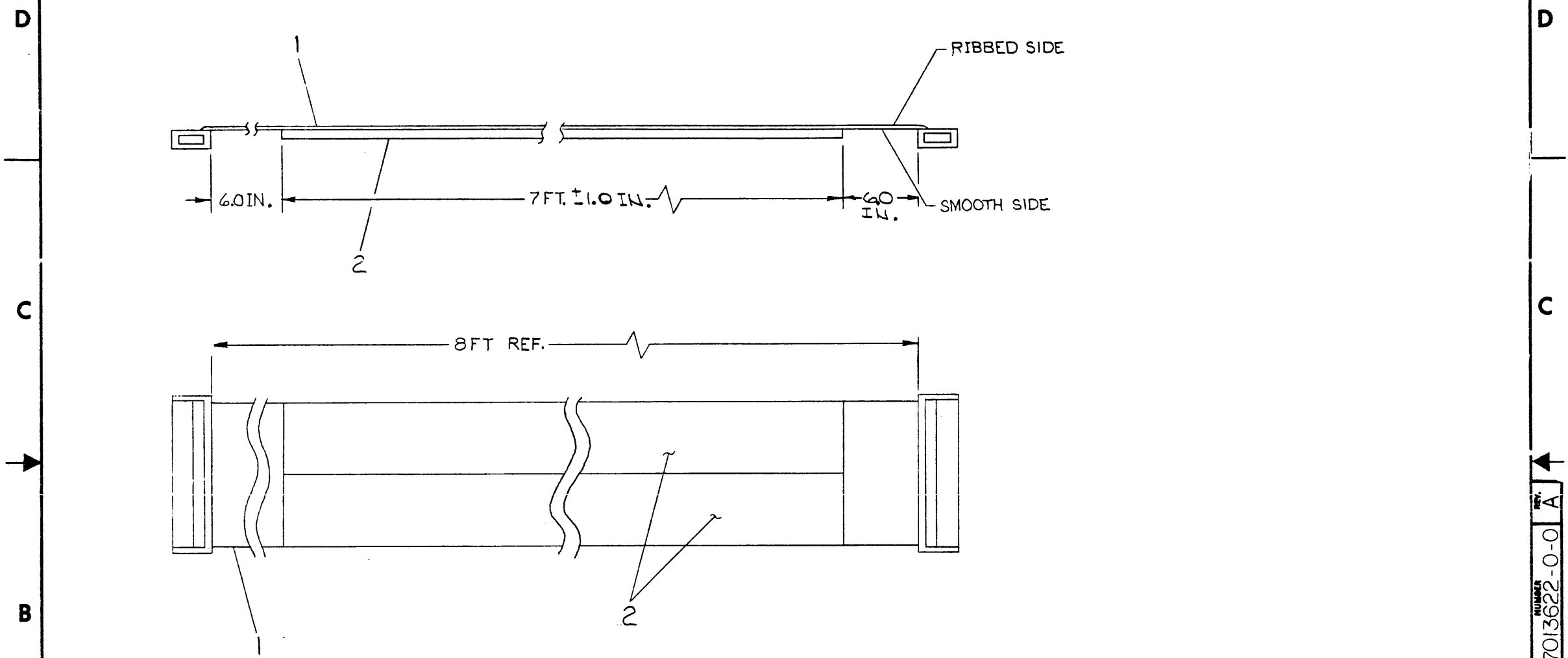
REV.	
CHANGE NO.	
CHK	

DRN <i>J. S. Searles</i> 1/19/77	FIRST USED ON	PDP11	digital
CHK'D <i>R. W. Conner</i> 1/19/77	TITLE	UNIBUS TO H854 ADAPTER BOARD	
ENG. <i>P. M. Olin</i> 1/19/77	PROJ. ENGR. <i>M. Olin</i> 1/19/77	SIZE CODE	NUMBER
PROD. <i>J. Searles</i> 1/19/77	NEXT HIGHER ASSY.	D CS	M9014-0-1
SCALE	SHEET 1 OF 1	DIST.	REV. A

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION"



REV.	CHANGE NO.	DATE	BY
A	1	2 APR 80	R. CHUMSAE
			R. Chumsoe 1/2/80

DEC FORM 100-C

7 FT.	TAPE, FOAM .12 THK x2.00 W	9009087-00	2
1	CABLE, JUMPER	D-UA-BCØ5L-08-0	1

DESCRIPTION		DWG./PART NO.		ITEM NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES							
ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE INCHES					
SURFACE QUALITY		OVER 0 TO 0.2	OVER 0.2 TO 1.2	OVER 1.2 TO 4.0	OVER 4.0 TO 12.0	OVER 12.0 TO 40.0	OVER 40.0 TO 80.0
IN	MEDIUM <input type="checkbox"/>	±.004	±.008	±.012	±.016	±.024	±.04
MICROINCHES	PREFERRED <input checked="" type="checkbox"/>	±.012	±.016	±.025	±.04	±.063	±.1

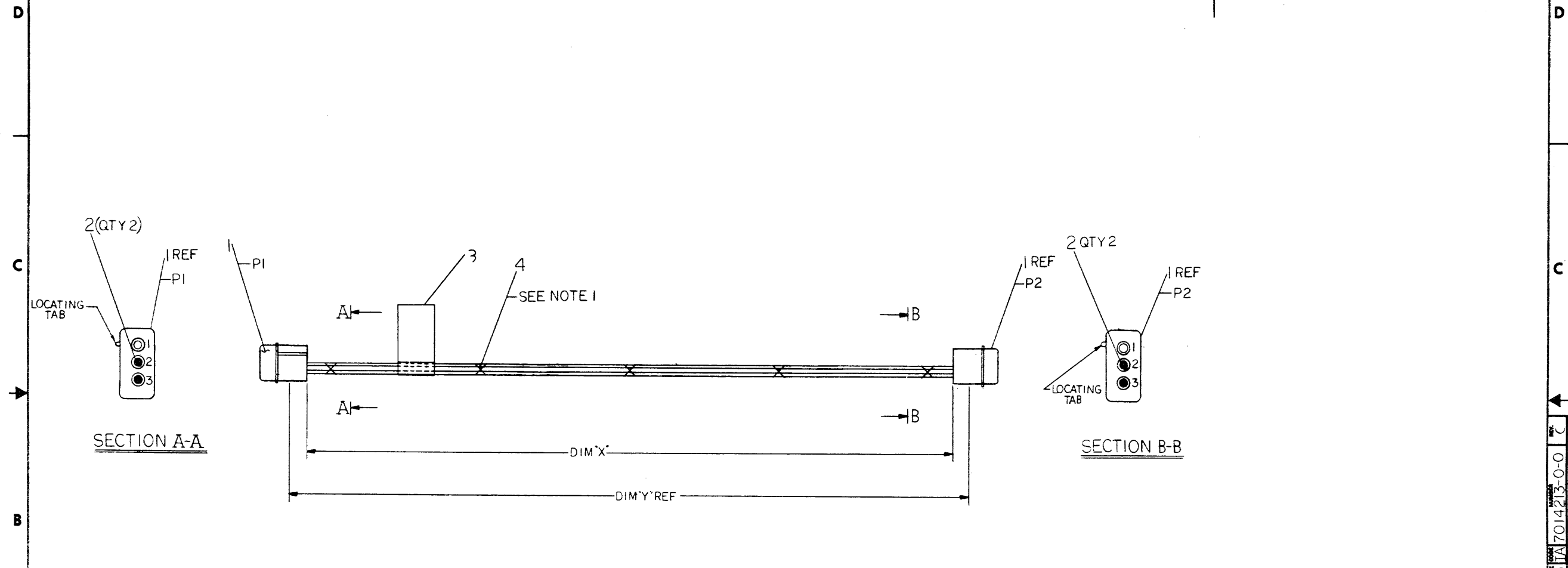
THIRD ANGLE PROJECTION	DRN. <i>J. Fisher</i> 12 Jul 77	FIRST USED ON	VAX 11780 digital
REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D. <i>D. Hoag</i> 18 Jul 77	TITLE	CABLE, UNIBUS (1178Ø)
DO NOT SCALE DWG	PROJ. ENG. <i>R. Chumsoe</i> 23 Sep 77		
MATERIAL SEE PARTS LIST	PROD. <i>P. Plain</i> 23 Sep 77		
FINISH	NEXT HIGHER ASSY.	SIZE CODE	C IA
	SCALE 1/1	NUMBER	7013622-0-0
	SHEET 1 OF 1	REV.	A

DRAWING NUMBER 7013622-0-0

THIS DRAWING AND SPECIFICATIONS HEREAFTER ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1977, DIGITAL EQUIPMENT CORPORATION

WIRE TABLE							LEGEND		
ITEM NO	AWG	COLOR	CONN	WITH	CONN	WITH	REMARKS	DIM 'X' VARIATION	DIM 'Y' (PRE-CUT) REF
			PI-2	1#2	P2-2	1#2		ØFT-9IN ±.5IN	ØFT-10IN ±.5IN
6	18	GRY/WHI	PI-2	1#2	P2-2	1#2		3FT-5IN ±.5IN	3FT-6IN ±.5IN
3	18	GRAY	PI-3	1#2	P2-3	1#2		4FT-1IN ±.5IN	4FT-2IN ±.5IN

NOTES:
1. USE CABLE TIES (ITEM #4) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY.



REV.	DATE	BY	CHKD.	DESCRIPTION
1	12 JUN 80	W. CANNON		INITIAL DESIGN
2	12 JUN 80	M. CANNON		REVISED FOR MANUFACTURE
3	12 JUN 80	J. STICKNEY		REVISED FOR MANUFACTURE
4	12 JUN 80	J. STICKNEY		REVISED FOR MANUFACTURE

CAUTION: SEE OFF SHT. PARTS LIST

DESCRIPTION	DWG. PART NO.	ITEM NO.
A/R WIRE, 18 AWG GRY/WHITE	9107360-89	6
1 LABEL, CABLE IDENT	9009532-00	5
A/R TIE, CABLE	9607031-00	4
A/R WIRE, 18 AWG GRAY	9107360-88	3
4 PIN, CONTACT	1209375-00	2
2 CONNECTOR MATE N LOCK	1209351-03	1

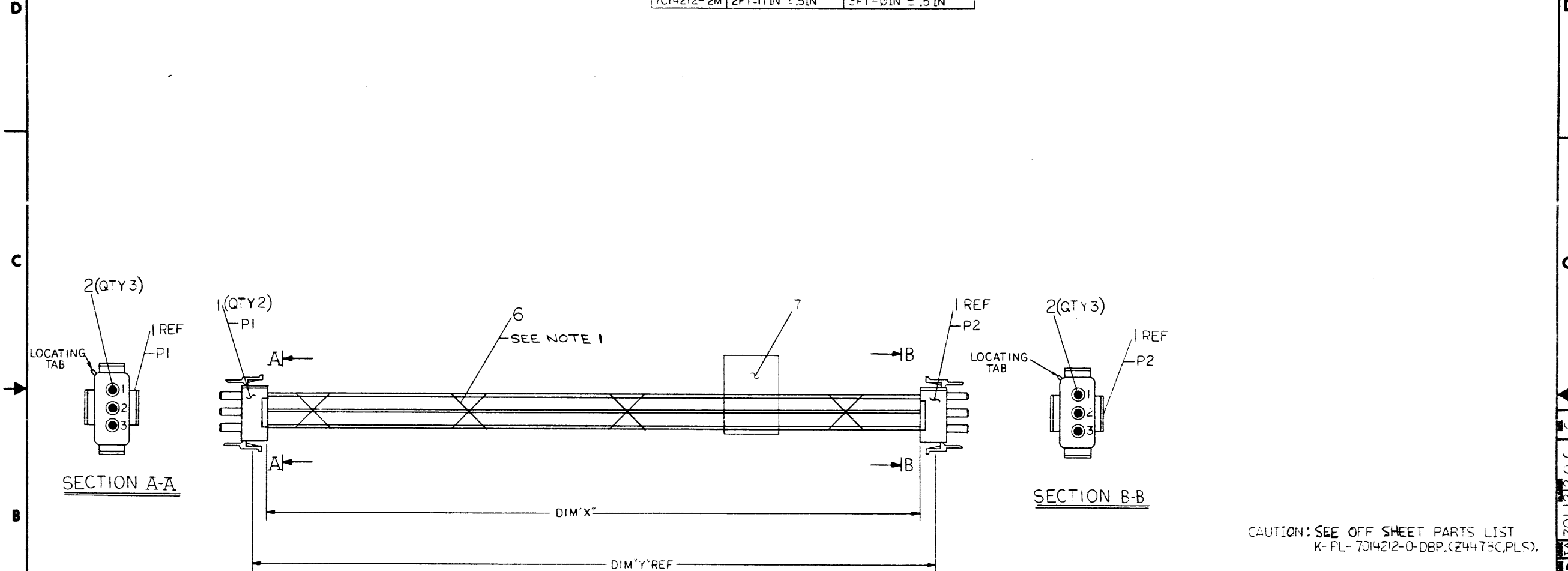
THIRD ANGLE PROJECTION		DRN. <i>[Signature]</i>	FIRST USED ON
REMOVE BURRS AND BREAK SHARP CORNERS		CHK'D. <i>[Signature]</i>	VAX 11/780
DO NOT SCALE DWG		ENG. <i>[Signature]</i>	TITLE
SEE PARTS LIST		PROJ. ENG. <i>[Signature]</i>	CABLE OVER TEMP
FINISH		NEXT HIGHER ASSY.	SIZE CODE
		MATERIAL	D
		SCALE NONE	NUMBER
		SHEET OF	REV. C
		DIST.	

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION OF DEPARTMENT 0/377 - DIGITAL EQUIPMENT CORPORATION

WIRE TABLE							
ITEM NO	DESCRIPTION	FROM	TO	REMARKS			
4	18 YELLOW	PI-1	P2-1				
5	18 VIOLET	PI-2	P2-2				
3	18 BLACK	PI-3	P2-3				

LEGEND		
NUMBER	DIM 'X' VARIATION	DIM 'Y' (PRECUT) REF
7014212-0H	ØFT-7IN ±.5IN	ØFT-8IN ±.5IN
7014212-0M	ØFT-11IN ±.5IN	1 FT-ØIN ±.5IN
7014212-1C	1 FT-3IN ±.5IN	1 FT-4IN ±.5IN
7014212-2C	2 FT-3IN ±.5IN	2 FT-4IN ±.5IN
7014212-2M	2 FT-11IN ±.5IN	3 FT-ØIN ±.5IN

NOTES:
1. USE CABLE TIES (ITEM #6) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY.



CAUTION: SEE OFF SHEET PARTS LIST
K-PL-7014212-0-DBP.(2447EC,PLS).

REV.	DATE	BY	CHK'D	DESCRIPTION
1	7/10/77	T. MARTEL		7014212-00001 A
2	12/16/78	R. MARTEL		7014212-00002 B
3	1/11/79	J. STICKNEY		7014212-00003 C

DESCRIPTION	DWG. PART NO.	ITEM NO.
1 LABEL, CABLE IDENT.	9009532-00	7
2 CABLE TIE, CABLE	9007031-00	6
3 WIRE 18 AWG VIOLET	9107360-77	5
4 WIRE 18 AWG YELLOW	9107360-44	4
5 WIRE 18 AWG BLACK	9107360-00	3
6 SOCKET, CONTACT	1212170-00	2
7 CONNECTOR, UNIVERSAL	1212167-00	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
ANGLES 30° 30'	CLAIM OF ACCURACY
SURFACE QUALITY	CHECK ONE
QUANTITY & VARIATION	MICROFINISHES
THIRD ANGLE PROJECTION	FIRST USED ON
REMOVE BURS AND BREAK SHARP CORNERS	DO NOT SCALE DWG
MATERIAL SEE PARTS LIST	FINISH

DRN. <i>W.D. Walker</i>	CHK'D <i>R. MarTel</i>	ENG. <i>R. MarTel</i>	PROJ. ENGR. <i>J. Stickney</i>
TITLE CABLE A.C., D.C. LOW			
SIZE D	CODE IA	NUMBER 7014212-0-0	REV. C
SHEET	OF	DIST.	