

FIELD MAINTENANCE PRINT SET

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B-TC-MS11-L-1	FIELD MAINTENANCE PRINT SET
B-DD-MS11-L	DRAWING DIRECTORY (MS11-L)
A-PL-MS11-L-Ø	PARTS LIST (MS11-L)
D-BD-MS11-L-4	MS11-L BLOCK DIAGRAM
D-FD-MS11-L-5	MS11-L FLOW DIAGRAM
D-TD-MS11-L-6	MS11-L TIMING DIAGRAM
B-DD-M7891-Ø	DRAWING DIRECTORY (M7891)
K-PL-M7891-DC-Ø	PARTS LIST (M7891) (SEE NOTE 1)
D-UA-M7891-Ø-Ø	UNIT ASSEMBLY (M7891) (SHTS 2,6, ONLY)
D-CS-M7891-Ø-1	CIRCUIT SCHEMATIC (M7891)
MPØØ672	MS11-L FIELD MAINTENANCE PRINT SET
D-M2-5013399-0-0	DRILL AND ETCH DRAWING (SHTS 2+5 ONLY)

[illegible]

Digital Equipment Corporation

MP00672

EN-01126-16-N678-13	REVISIONS		REV.	A
	CHG. NO.	NS11-L-MLOOI		
	DATE	1-20-82		

digita

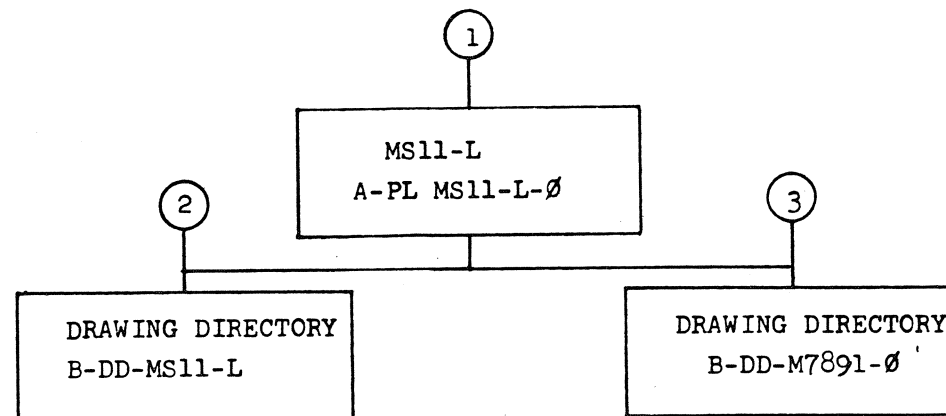
USED ON OPTION/MODEL		DRN.	DATE
PDP 11/34		E.DEVRIES	
		CHK'D	DATE
		R.V. Milano	9/28/78
		PROJ. ENG.	DATE
		R. Given	9-28-78
		FIELD SERV.	DATE
		R.W. Richard	9/28/78
SHEET I OF 1			

TITLE:									
MS11-L (128K X 18)									
MOS MEMORY SYSTEM									
SIZE B	CODE TC	NUMBER MS11-L-1				REV. A			
DIST.									

DRE 124

MLZ

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 1978
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REV.	MS11-L	DD	B
	NUMBER	CODE	SIZE

TITLE	DRAWING DIRECTORY	SIZECODE	NUMBER	REV
MS11 (128K X 18) MCS MEMORY SYSTEM		B DD	MS11-L	*
SHEET 2 OF 3				

DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY E. DEVRIES

CHECKED *R. Mariano*

SECTION 1

DATE

DATE 9/26/78

ENG *R. Given*

PROD	Bob Schaub
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DATE 9-28-78

DATE 9/28/78

ISSUED SECT.

1

[illegible][illegible]

TITLE	MS11-L (128K X 18) MOS MEMORY SYSTEM
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ASSY NO.	B-DD-MS11-L
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SIZE	CODE
A	PL

NUMBER
MS11-L-Ø

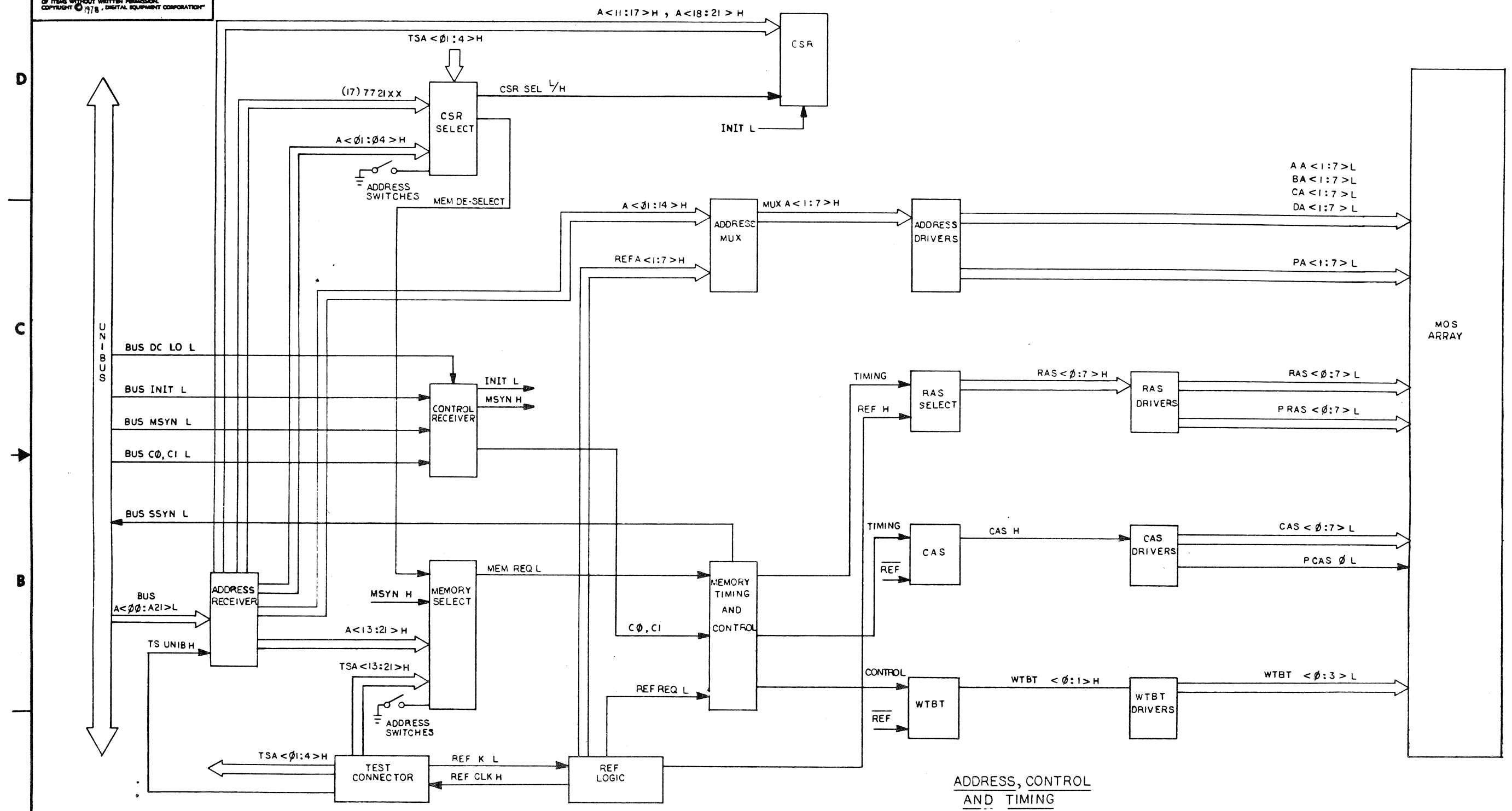
REV
*

ECO NO.	
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SHEET 1 OF 1

DIST

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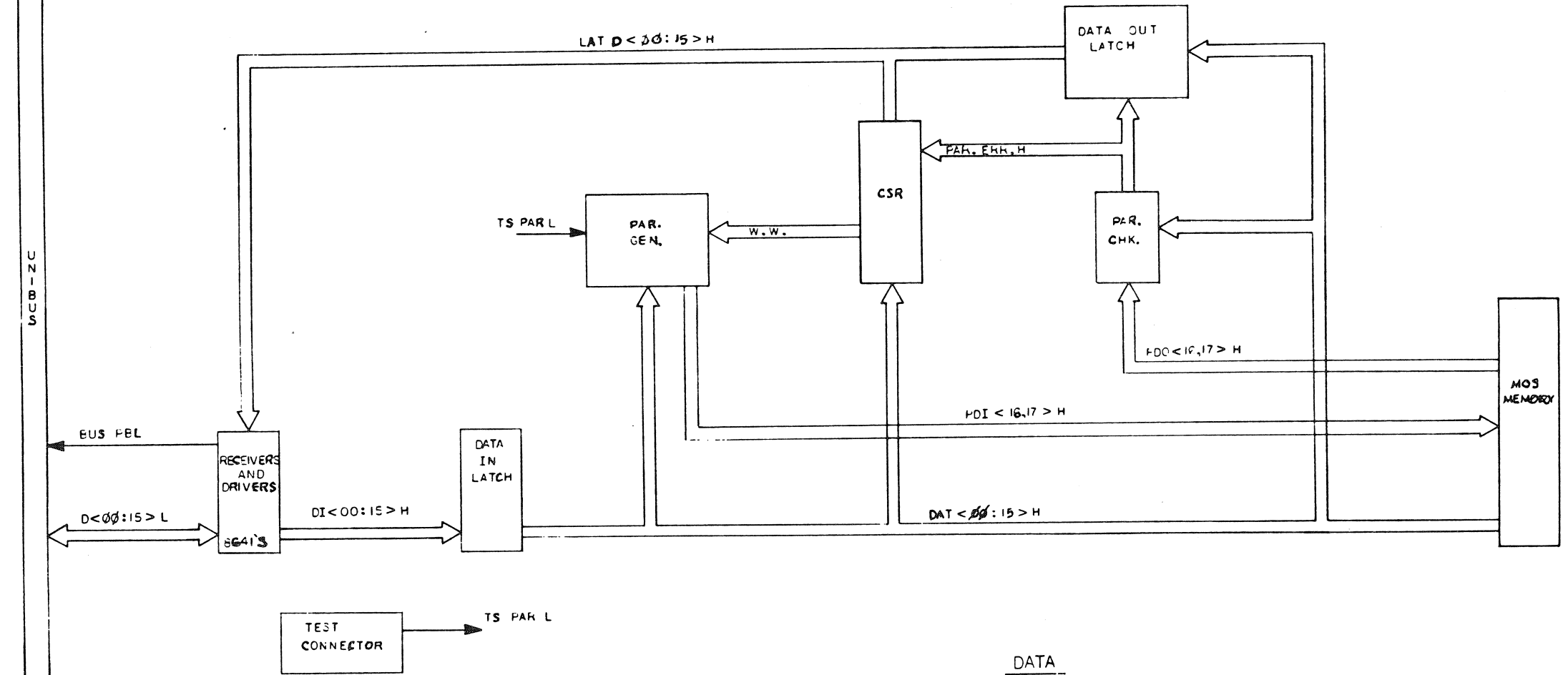
ADDRESS, CONTROL
AND TIMING

DRN. E. DE VRIES	17 AUG 78	FIRST USED ON	digital
CHK'DR. M. M. M.	9/14/78	TITLE	MSII-L-1
ENG. R. H. H.	9-28-78		BLOCK DIAGRAM
PROJ. ENG. R. H. H.	9-28-78		
PROD. R. H. H.	9/21/78		
NEXT HIGHER ASSY.			
B DD MSII-L-0		SIZE CODE	NUMBER
SCALE		D BD	MSII-L-4
SHEET	1 OF 2	DIST.	

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MS11-L-4 2

U-C-B-Z-U



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE MS11-L
BLOCK DIAGRAM

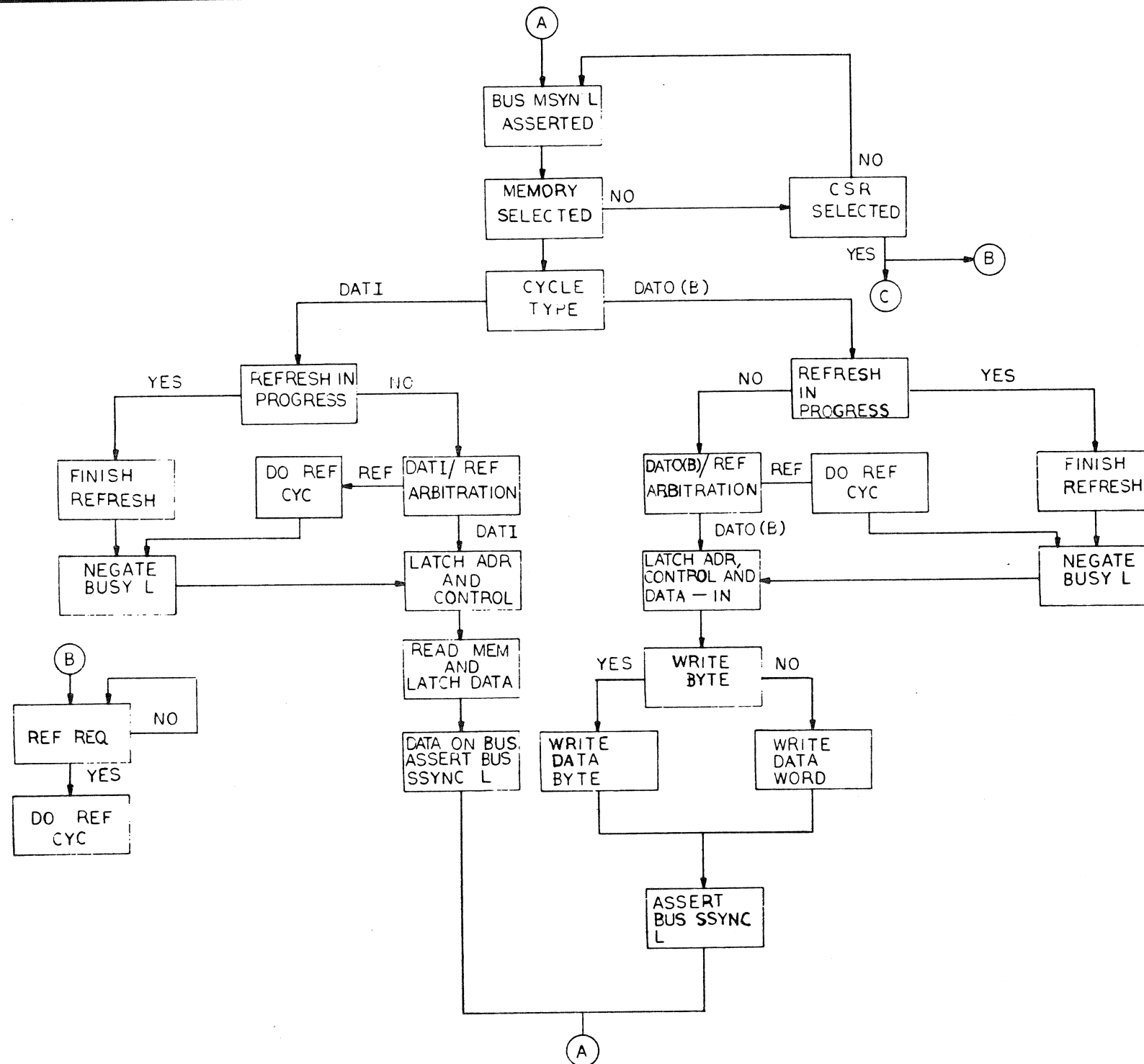
SIZE CODE NUMBER
D BD MS11-L-4

REV.
*

SCALE SHEET 2 OF 2

DIST.

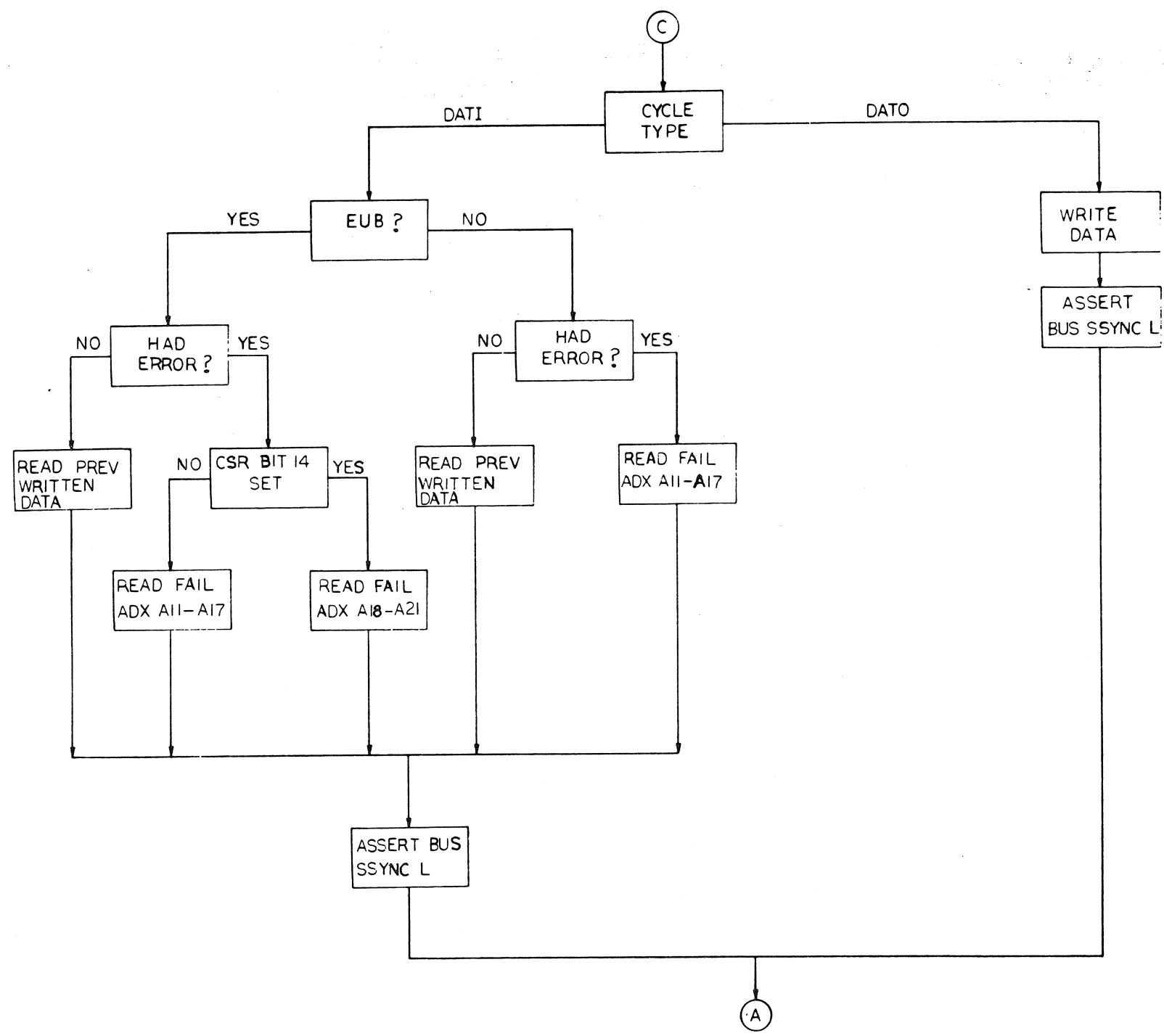
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DRN. E. DeVries	27-6-78	FIRST USED ON	
CHK'D R. Thomas	9/26/78	TITLE	MS11-L (DATI/DATO)
ENG. R. Thomas	9-28-78	FLOW DIAGRAM	
PROJ. ENG. R. Thomas	9-28-78		
PROD. S. J. J.	10/1/78		
NEXT HIGHER ASSY.			
B-DD-MS11-L		SIZE	D
SCALE		CODE	FD
SHEET	1 OF 2	NUMBE	MS11-L-5
		DIST.	
		REV.	*

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9-7-11SW D 2

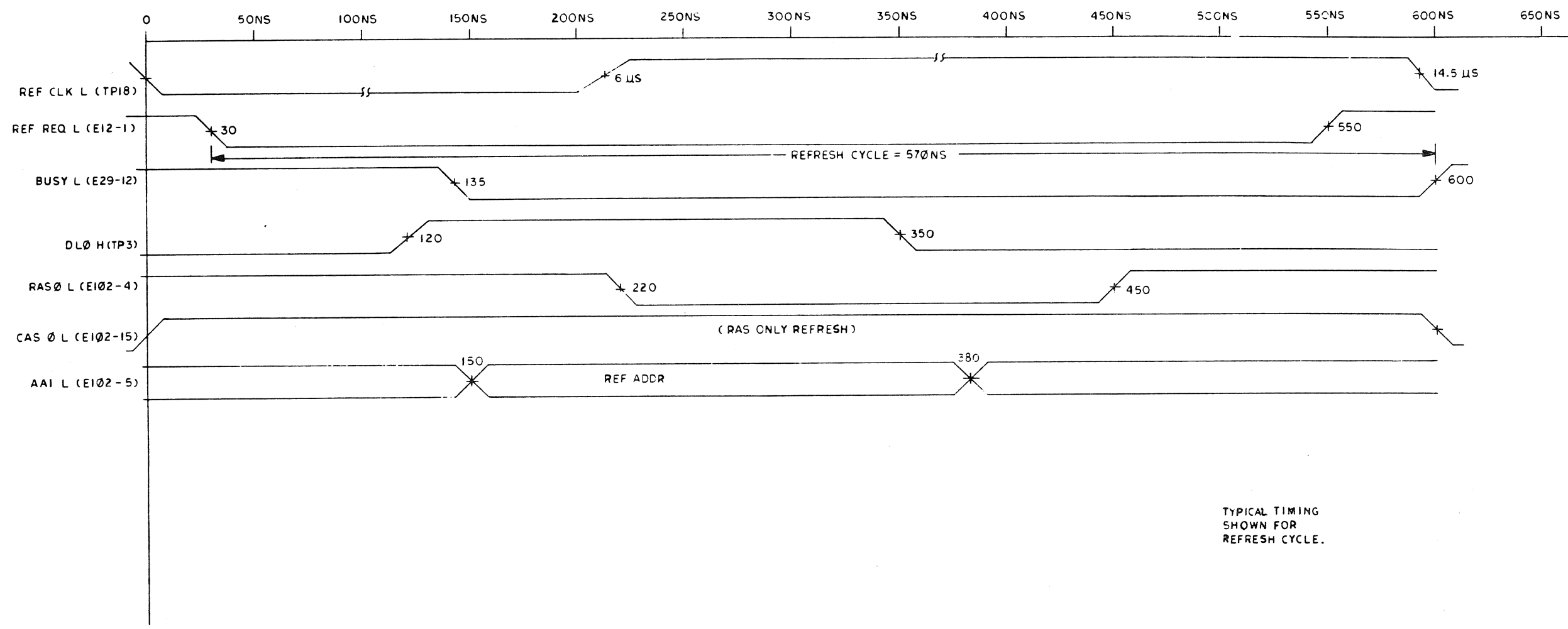


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE MSII-L (DATI/DATO) FLOW DIAGRAM		SIZE CODE D FD	NUMBER MSII-L - 5	REV. *
SCALE	SHEET 2 OF 2	DIST.		

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REFRESH CYCLE

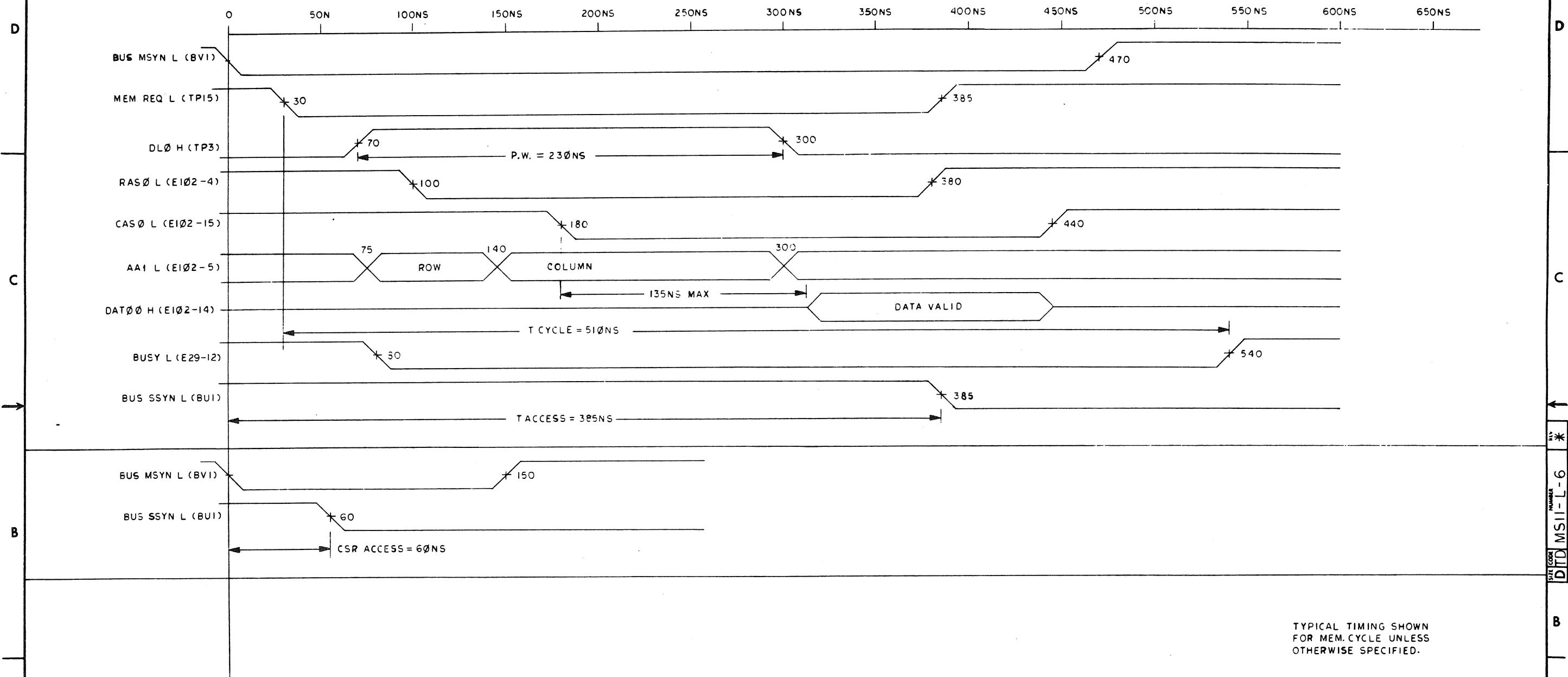


TYPICAL TIMING
SHOWN FOR
REFRESH CYCLE.

DRN: J. Vance	6-30-78	FIRST USED ON	digital
CHK'D: R. H. H.	9-28-78	TITLE	MSII-L
ENG: R. H. H.	9-28-78	NUMBER	MSII-L-6
PROJ. ENG: R. H. H.	9-28-78	REV.	*
PROD: J. J. J.	9/21/78	SCALE	1 OF 3
NEXT HIGHER ASSY.		SHEET	1 OF 3
B-DD-MSII-L		DIST.	

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DATI CYCLE



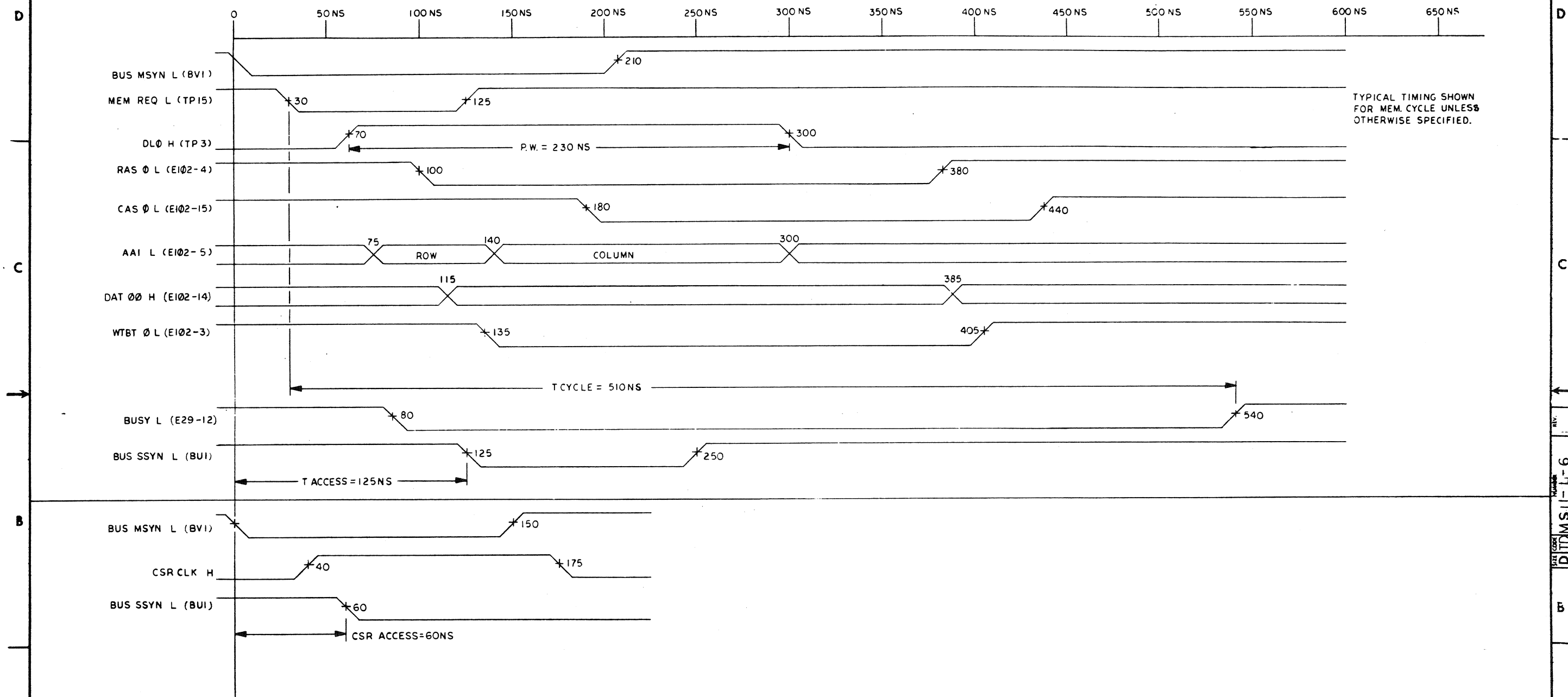
TYPICAL TIMING SHOWN FOR MEM. CYCLE UNLESS OTHERWISE SPECIFIED.

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		MSII-L TIMING DIAGRAM	SIZE/CODE		D TD	NUMBER		MSII-L-6	REV.		*
SCALE		1/4	SHEET		2 OF 3	DIST.					

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DATO CYCLE



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MSII-L TIMING DIAGRAM
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SIZE	CODE	NUMBER
D	TD	MSII-L-6

REV.	
*	

SCALE		SHEET	3	OF	3
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[illegible]

[illegible]

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
29	29		1303110-00	19.6 1/4W 1% RN55D-F 100PPM (13-00	1	R10
30	30		1303156-00	34.8 K 1/4W 1% RN55D-F 100PPM (13-00	1	R5
31	31		1305123-00	215 1/4W 1% RN55D-F 100PPM (13-00	1	R20
32	32		1305322-00	7.5 K 1/4W 1% RN55D-F 100PPM (13-00	1	R4
33	33		1312466-00	10 1W 1% WW (13-00	1	R1
34	34		1315678-00	R NETWORK 3-18 OHM RESISTORS 5% SIP	16	R41-R56
35	35		1315339-00	R NETWORK 4-5K RESISTORS 5% SIP	7	R9,R22,R24-R27,R31
36	36		1613120-00	DELAY= 200NS,10TAPS	1	E18
37	37		1910532-00	74S00 NAND GATE-QUAD 2IN	3	E16,E46,E53
38	38		1910533-00	74S03 NAND GATE-QUAD 2IN,OPN COLLECT	1	E7
39	39		1910536-00	74S10 NAND GATE-TRIPLE 3IN	2	E28,E39
40	40		1910537-00	74S11 AND GATE-TRIPLE 3INPUT	2	E29,E44
41	41		1910539-00	74S20 NAND GATE-DUAL 4INPUT	1	E59
42	42		1910544-00	74S74 FF-D DUAL,EDGE TRIGGER	2	E33,E34
43	43		1910544-01	74S74-60GG-D DUAL,EDGE TRIGGER,SYNCHR	1	E6
44	44		1910549-00	74S158 MUX 1 OF 2 (QUAD)	2	E58,E65
45	45		1911469-00	DEC 8640 RECEIVER,BUS,QUAD,UNIBUS,Q-BU	6	E48,E62,E25,E31,E37,E41
46	46		1911573-00	74S280 PARITY GEN/CHKR,9BIT ODD/EVEN	4	E42,E49,E56,E63
47	47		1911579-00	8641 TRANSCEIVER,BUS,QUAD,UNIBUS	6	E1,E3,E8,E13,E19,E55
48	48		1911675-00	74S138 DECODER-THREE INPUT	1	E51
49	49		1911944-00	555CN TIMER,FUNCT.BLOCK	1	E5
50	50		1911903-00	74S133 NAND GATE-POSITIVE 13IN	1	E45
51	51	SEE LINE #83.	1912048-02	DEC 7812-02 VOLT.REG.FIX T12V 1.5A T	1	Q2
52	52		1912388-00	74S02 NOR GATE-QUAD 2IN,POS	1	E30
53	53		1912389-00	74S08 AND GATE-QUAD 2IN,POS	2	E22,E23
54	54		1912541-00	VOLT.REG.FIX -5V .02A	1	Q1
55	55		1912746-00	DEC 74S37 NAND GATE-QUAD 2IN	1	E12
56	56		1912807-00	LS10 NAND GATE-TRIPLE 3IN	2	E11,E40
57	57		1912828-00	LS85 COMPARATOR,4BIT MAGNITUDE	1	E54
58	58		1912853-00	LS175 FF-D QUAD	2	E10,E15
59	59		1912867-00	LS298 MUX 1 OF 4,2IN W/STORAGE	2	E21,E27
60	60		1913340-00	74S32 OR GATE-QUAD 2IN	2	E35,E36
61	61		1913462-00	74S240 OCTAL BUFFER,INVERTING TRI-STA	1	E52
62	62		1913670-00	74S373 LATCH 8BIT TRASP TRISTATE	2	E50,E57,E64
63	63		1913777-00	LS240 DRIVER,LINE,OCTAL,TRI-ST	9	E24,E68,E69,E86,E119,E136,
					CONT	E169,E186,E203
64	64		1914086-00	74S30 NAND GATE-POS 8IN	1	E60
65	65		1914451-00	74LS393 COUNTER,BINARY,4BIT	1	E43
66	66		1915193-00	LS244 DRIVER,LINE,OCTAL,TRI-ST	1	E17
67	67		1915219-00	LS373 FF-D OCTAL-TRANSPARENT	8	E2,E4,E9,E14,E20,E26,E32,E38
68	68		23249F1-00	F1-01		
69	69		23468A2-00	A2-05	PROM, 1	E67
70	70		7414765-00	HEATSINK	PROM,	E66
71	71		9000024-01	EYELET, ROLLED FLANGE, .121 OD X .196 LG	1	
72	72		9010092-00	SCREW,PAN ,PHIL, 4-40X 5/16 SS	12	
73	73		9007201-03	TRANSIPADS #10253	1	
74	74		9009149-00	PIN, STAKING, P.C. BOARD, .025 X .025	1	
75	75		9009185-00	JUMPER, WIRE, INSULATED, BLACK BAND	5	
					11	W2,W7,W10-W16,W20,W21

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE PARTS LIST MS11-LD 128K X 18 MOS MEMORY	SIZE K	CODE PL	DOCUMENT NUMBER M7891-DC-DBP	REV A
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LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
76	76		1109991-00	1N 754A VZ= 6.8 5% .40W	1	D5
77	77		1105275-00	***** THIS ITEM IS NOT USED *****	-	
78	78		1210929-04	FUSE, SUB-MINI .250A, 125V, AXIAL LEAD	1	F2
79	79		2114408-01	16K MOS RAM 200NS 16PIN DYNA	144	E70-E85,E120-E135,E170-E185,
					CONT	E87-E118,E137-E168,E187-E202,
					CONT	E204-E219
80	80		1301969-00	22 1/4W 5% CC (13-00	1	R34

81 NOTE: M7891-DA IS A PRIMARY VARIATION OF THE 128K X 18 BIT SYSTEM (NOT A MODULE TYPE).
82 NOTE: M7891-DC IS A MODULE TYPE USING FUJITSU 16K MOS DEVICES.
83 NOTE: 1912048-05 MAY BE SUBSTITUTED FOR ITEM 51 PART #1912048-02.

TITLE	PARTS LIST	SIZE	CODE	DOCUMENT NUMBER	REV
DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	M611-LD 128K X 18 MOS MEMORY	K	PL	M7891-DC-DBP	A