

FIELD MAINTENANCE PRINT SET

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KD11-F

Digital Equipment Corporation

REVISIONS		REV.		USED ON OPTION/MODEL PDP11	DNR. L. HEVESH	DATE	TITLE: PROC /4K RAM MEMORY								digital			
		CHK. NO.			CHK'D	DATE												
		DATE					PROJ. ENG.	DATE	SIZE B	CODE TC	NUMBER KD11-F-0-2				REV. *			
							FIELD SERV.	DATE	DIST.									
						SHEET I OF 1												

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NOTES:

NOTES:

- ADJUST R14 SO THAT THE CPU FREQUENCY MEASURED AT E57 PIN 6 IS 2.5 MHZ MIN. TO 2.63MHZ MAX. THE MODULE MAY BE OPERATED AT OTHER FREQUENCIES FOR TEST PURPOSE ONLY. SEE SHEET (K-9).
- ADJUST R15 SO THAT THE REFRESH FREQUENCY MEASURED AT E78 PIN 8 IS 625 HZ $\pm$ 5 HZ. SEE SHEET (K-9).
- TIME DELAY FROM FALLING EDGE ON E51 PIN 9 TO FALLING EDGE ON E76 PIN 4 SHOULD BE 110 TO 140 NS. R7 MAY BE REMOVED TO INCREASE THE DELAY SLIGHTLY IF LESS THAN 110 NS IS MEASURED. SEE SHEET (K-5).
- JUMPER FUNCTIONS AND CONFIGURATION ARE AS FOLLOWS:

JUMPER SELECT FEATURES				
JUMPER	SELECTION WHEN INSTALLED	OPT. ON	SHIPPING STATUS	
			M7264 (REV E)	-YA
W1	RESIDENT MEMORY BANK 1	C.O.	R	R
W2	RESIDENT MEMORY BANK 0	C.O.	I	R
W3	DISABLE EVENT LINE	C.O.	P	R
W4	DISABLE MEMORY REFRESH	C.O.	R	I
W5	POWER UP MODE SELECT	C.O.	R	R
W6	POWER UP MODE SELECT	C.O.	R	R
W7	BIASING VOLTAGE VDATA = VROM	F.O.	I	I
W8	BIASING VOLTAGE VCTL = VROM	F.O.	I	I
W9	DISABLE REPLY FROM RESIDENT MEMORY	F.O.	P	I
W10	DISABLE REPLY DURING REFRESH	C.O.	R	R
W11	ENABLE ON BOARD MEMORY SELECT	C.O.	I	R

* INSTALLED IF RESIDENT RAM IS NOT THE SLOWEST REPLY IN THE SYSTEM.

POWER-UP MODES		
MODE	JUMPERS	MODE SELECT
0	R P	PC AT 24 AND PS AT 26, OR HALT MODE
1	R I	ODT MICROCODE
2	I R	PC AT 173000 FOR USER BOOT STRAP
3	I I	SPECIAL PROCESSOR MICROCODE (not implemented)

I; INSTALLED
R; REMOVED
C.O.; CUSTOMER OPTION
F.O.; FACTORY OPTION

4K RAM	16	9	8
DEC MH0026	3		
DEC 75322	7	14	
DEC 7497	8	16	
DEC 8641	8	16	
DEC 74S257	8	16	
DEC 74S174	8	16	
DEC 74S140	7	14	
DEC 74S139	8	16	
DEC 7475	12	5	
DEC 74S74	7	14	
DEC 7474	7	14	
DEC 7442	8	16	
DEC 74S11	7	14	
DEC 74S10	7	14	
DEC 8037	8	16	
DEC 74S05	7	14	
DEC 74S04	7	14	
DEC 74S00	7	14	
DEC 7400	7	14	

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

IC PIN LOCATIONS

- COMPONENTS ARE NOT INSTALLED (RESERVED OPTION) UNLESS SPECIFICALLY INSTRUCTED.
- DELETED FOR M7264-YA VERSION

M7264	-3.9VDB FOR LSI CHIP SET, -5VDB FOR MOSTEK 4K RAM
M7264-YA	-3.9VDB FOR LSI CHIP SET, NO ON-BOARD RAM
M7264-AB	-3.9VDB FOR LSI CHIP SET, -5VDB FOR INTEL 4K RAM
M7264-BB	SAME AS M7264 EXCEPT E58, 63, & 70
M7264-YB	SAME AS M7264-YA EXCEPT E58, 63 & 70

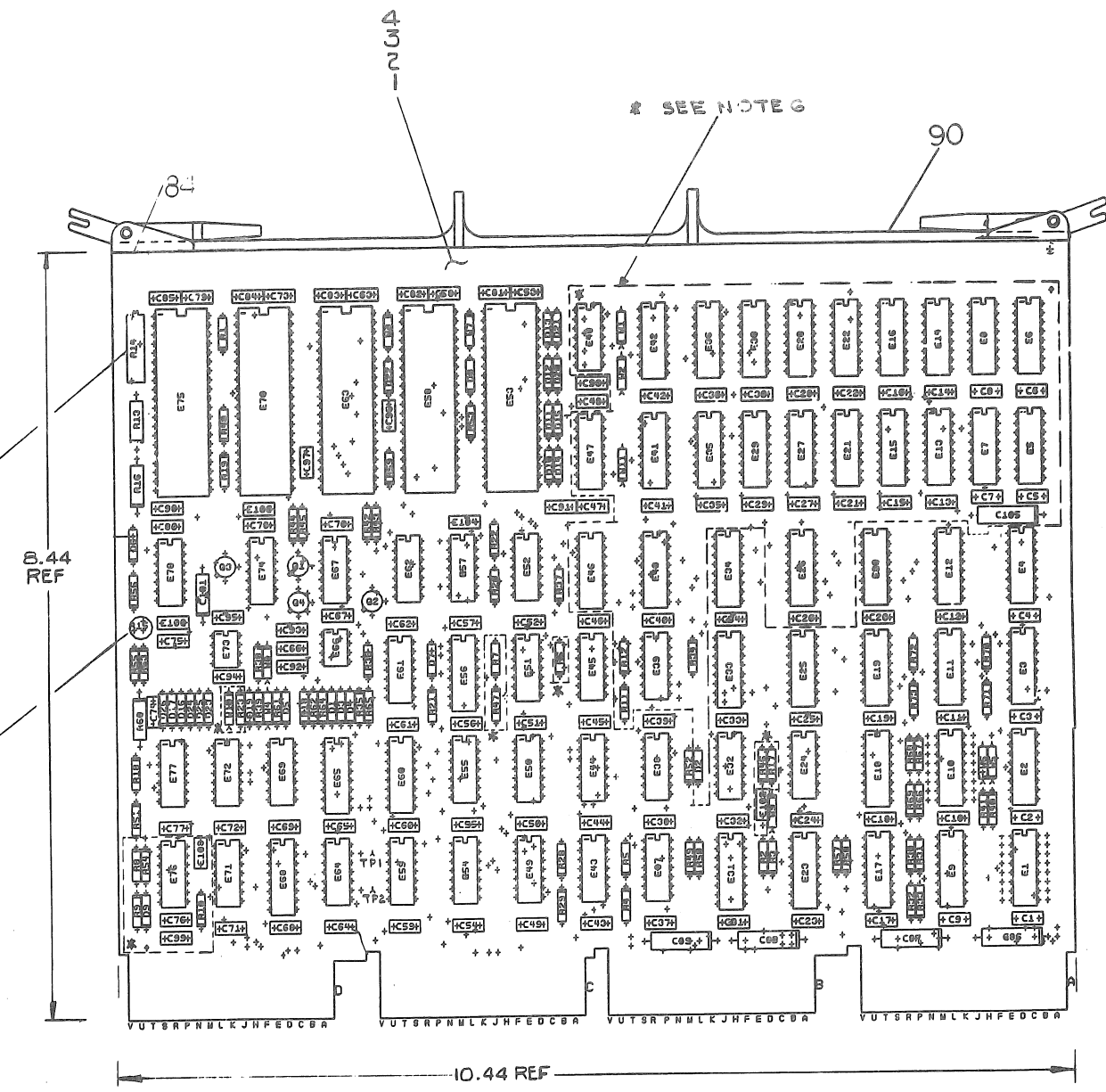
8 SIGNAL DESIGNATION
XX YYY Z
SIGNAL NAME
H (HIGH), L (LOW) WHEN ASSERTED
SIGNAL ORIGIN (PAGE) IDENTIFIER

ALTERNATE PARTS CHART		
ITEM#	PREFERRED PART	ALTERNATE PART
90	1213113-01	7413826-00 AND -01
9, 10	1001610-00	1001610-01

- THE 23002C4 IS AN ALLOWABLE SUBSTITUTION FOR THE 23002C4 IN VARIATIONS M7264, M7264-AB AND M7264-YA. THE 23002C4 ONLY MUST BE USED IN THE M7264-BB AND M7264-YB.
- THE 23002B6 IS AN ALLOWABLE SUBSTITUTION FOR THE 23003B6 ON THE M7264-BB AND M7264-YB THE 23003B6 IS PREFERRED.

SEE NOTE 1

SEE NOTE 2

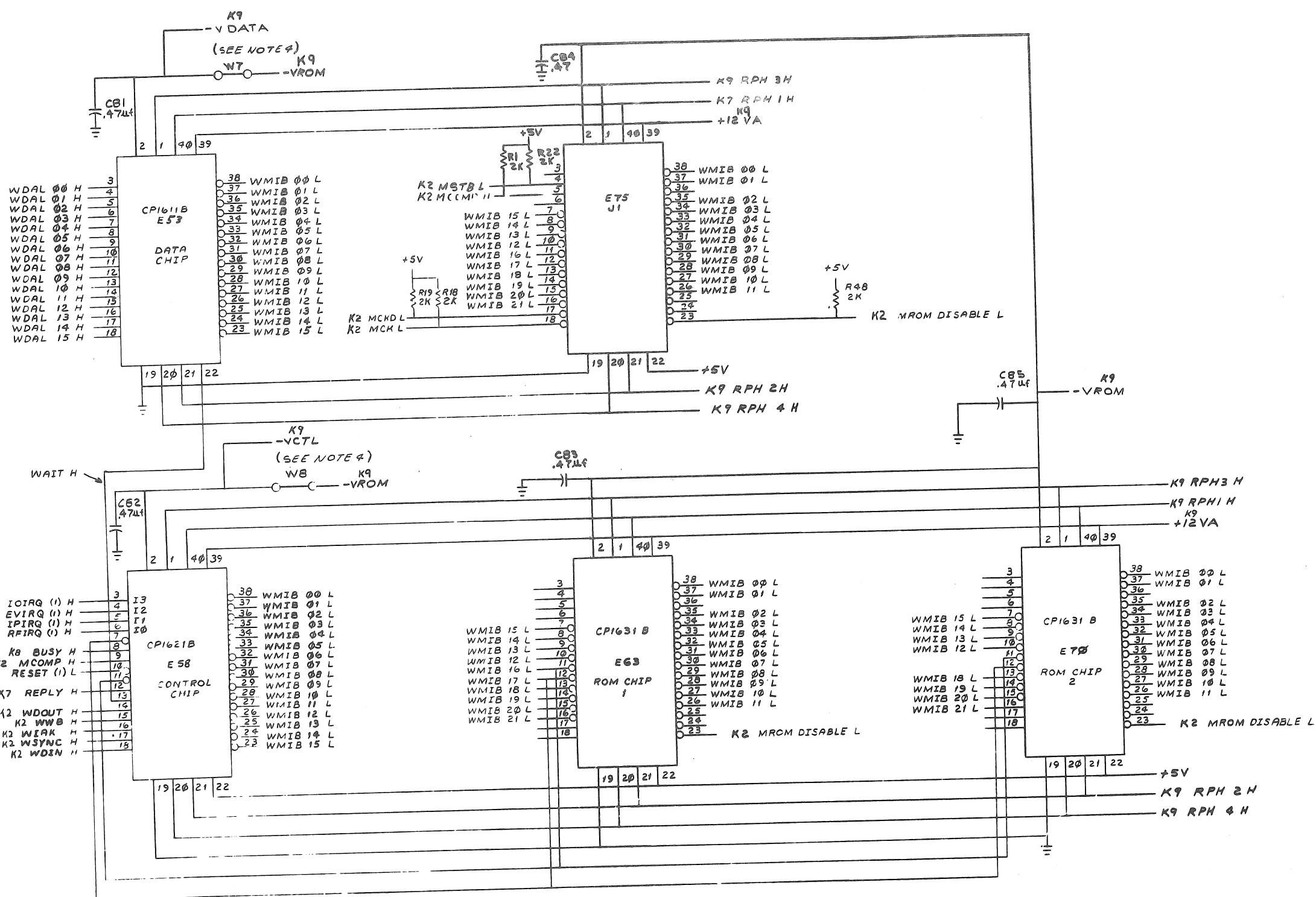


QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
FIRST USED ON OPTION MODEL				
ETCH BOARD REV. E				
PARTS LIST				
DRN.		DATE		
CHK'D.		DATE		
ENG.		DATE		
PROJ. ENG.		DATE		
PROD.		DATE		
NEXT HIGHER ASSY		DATE		
SCALE		SHEET 1 OF 10		
DEC NO.		EIA NO.		REV. W
SEMICONDUCTOR CONVERSION CHART				
TITLE LSI-11 CPU MODULE				
SIZE CODE DCS M7264-0-1				

8			7			6			5			4			3			2			1		
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PREFIX "K2" APPLIES
TO ALL WDAL
WMIB } SIGNALS

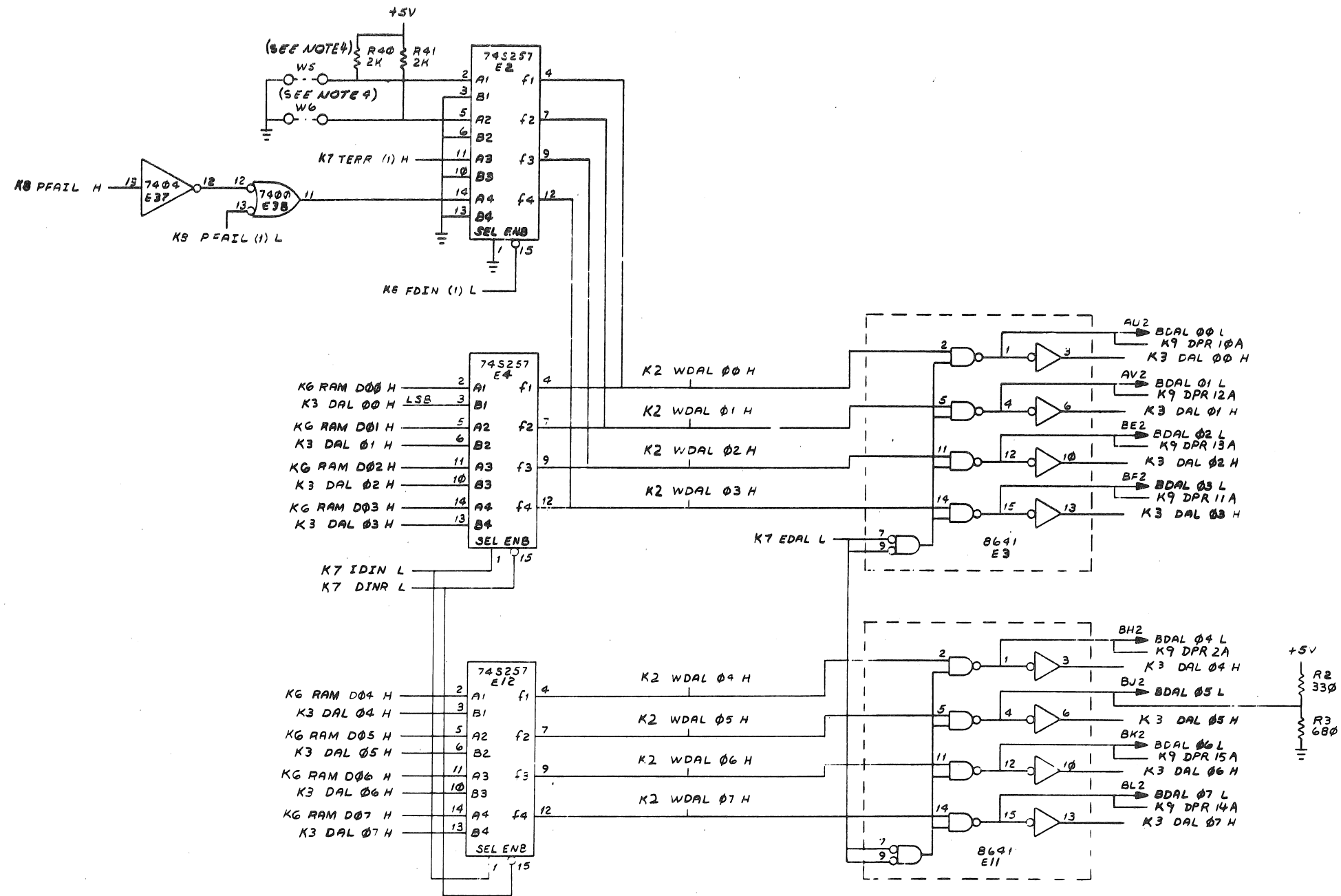


REVISIONS		
CHK	CHANGE NO	REV

DEC FORM NO.
DSD 1.58

TITLE		SIZE	CODE	NUMBER		REV.
LSI-II CPU MODULE (K2)		D	CS	M7264-0-1	W	
SCALE		SHEET	3 OF 10	DIST.		

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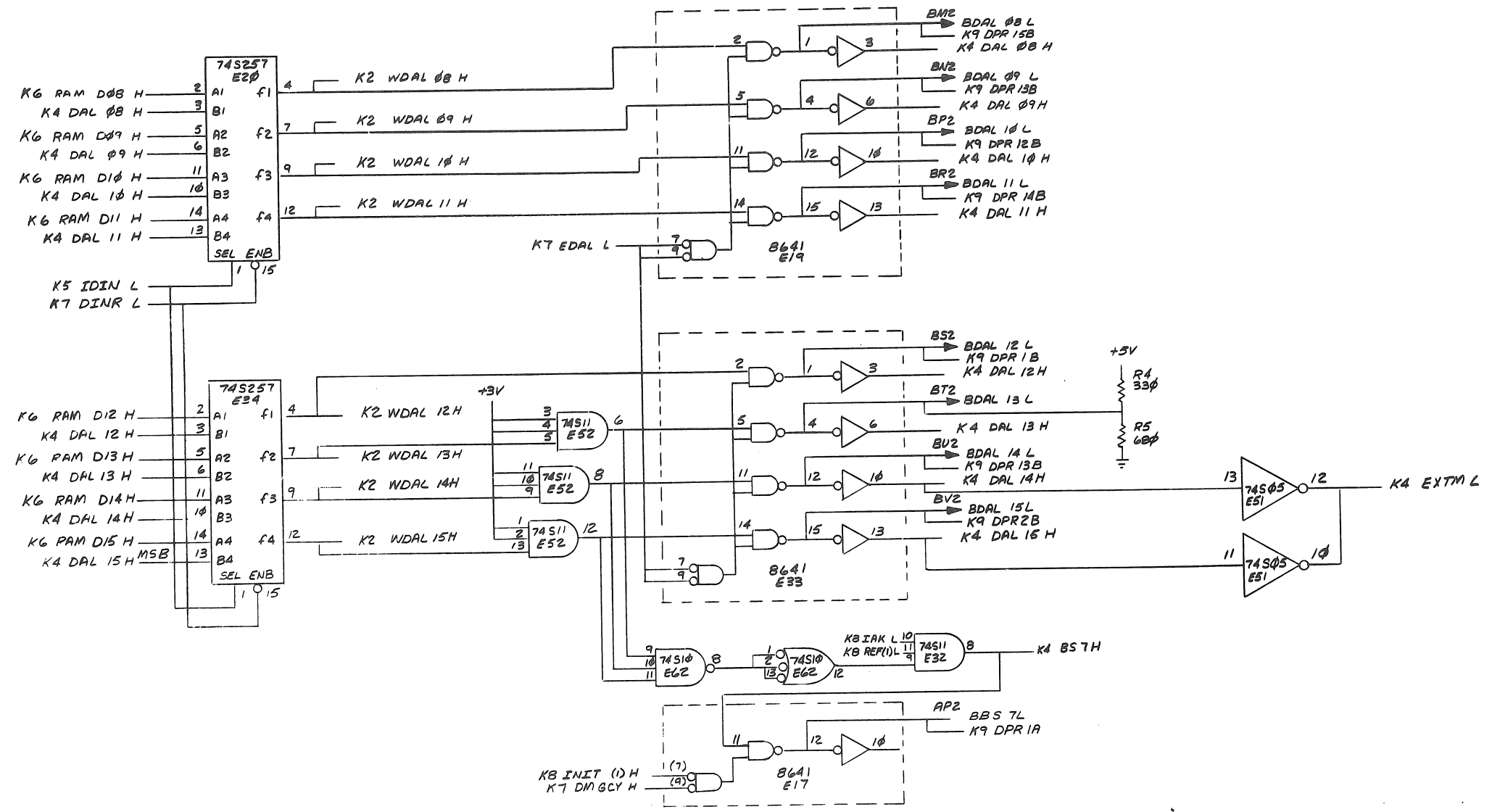


REVISIONS		
CHK	CHANGE NO	REV

SEC FORM NO. 128

TITLE		SIZE CODE	NUMBER	REV.
LSI-11		D CS	M7264-0-1	W
CPU MODULE (K3)				
SCALE		SHEET	4 OF 10	DIST.

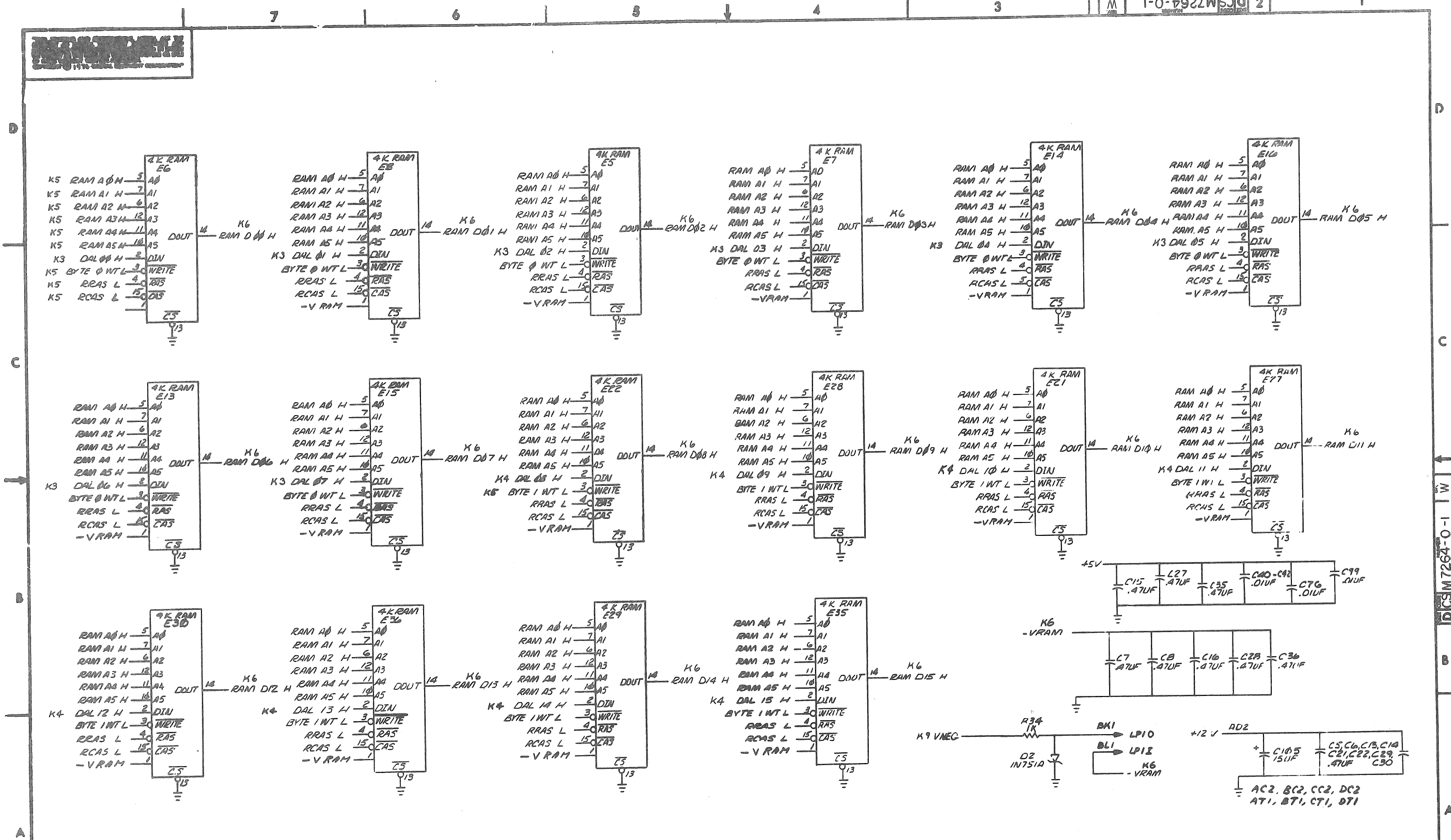
REVISIONS		
CHK	CHANGE NO	REV



TITLE		SIZE	CODE	NUMBER		REV.
LSI-II CPU MODULE (K4)		D	CS	M7264-0-1		W
SCALE	1/1	SHEET		5	OF	10
DIST.						

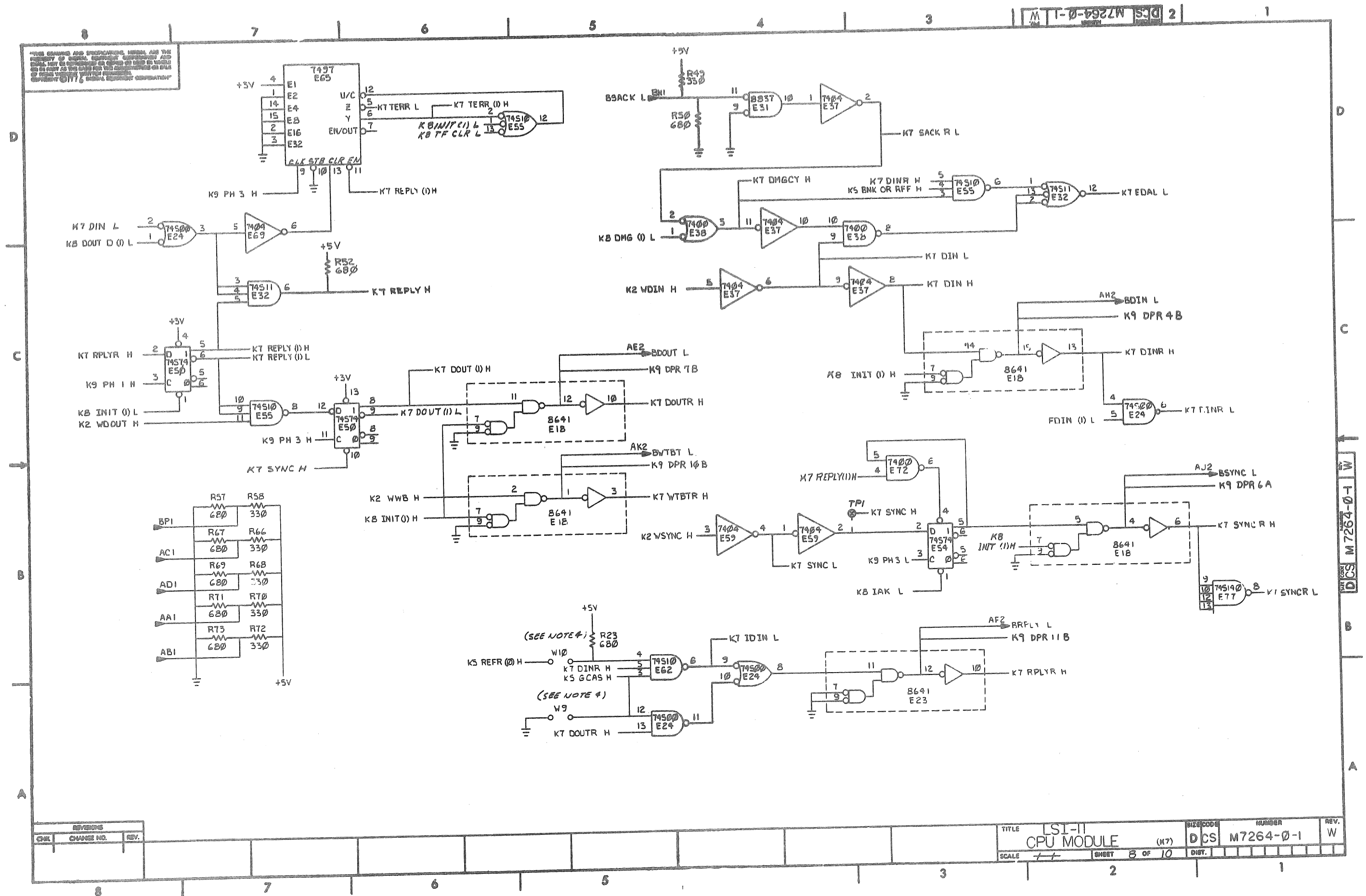


TITLE		SIZE CODE		NUMBER	REV.
LSI-II CPU MODULE (K5)		DCS		M7264-0-1	W
SCALE	SHEET	OF	DIST.		
1:1	5	5			



CIRCUIT SCHEMATIC ON THIS SHEET IS DELETED FOR "YB" VERSION

REVISIONS			TITLE					SIZE/CODE		NUMBER		REV.
CHK	CHANGE NO.	REV.	LSI-11					DCS		M7264 0-1		W
			CPU MODULE (K6) <td colspan="2">SHEET 7 OF 10<td colspan="2"></td><td></td></td>					SHEET 7 OF 10 <td colspan="2"></td> <td></td>				
			SCALE				DIST.					
					4		3		2		1	





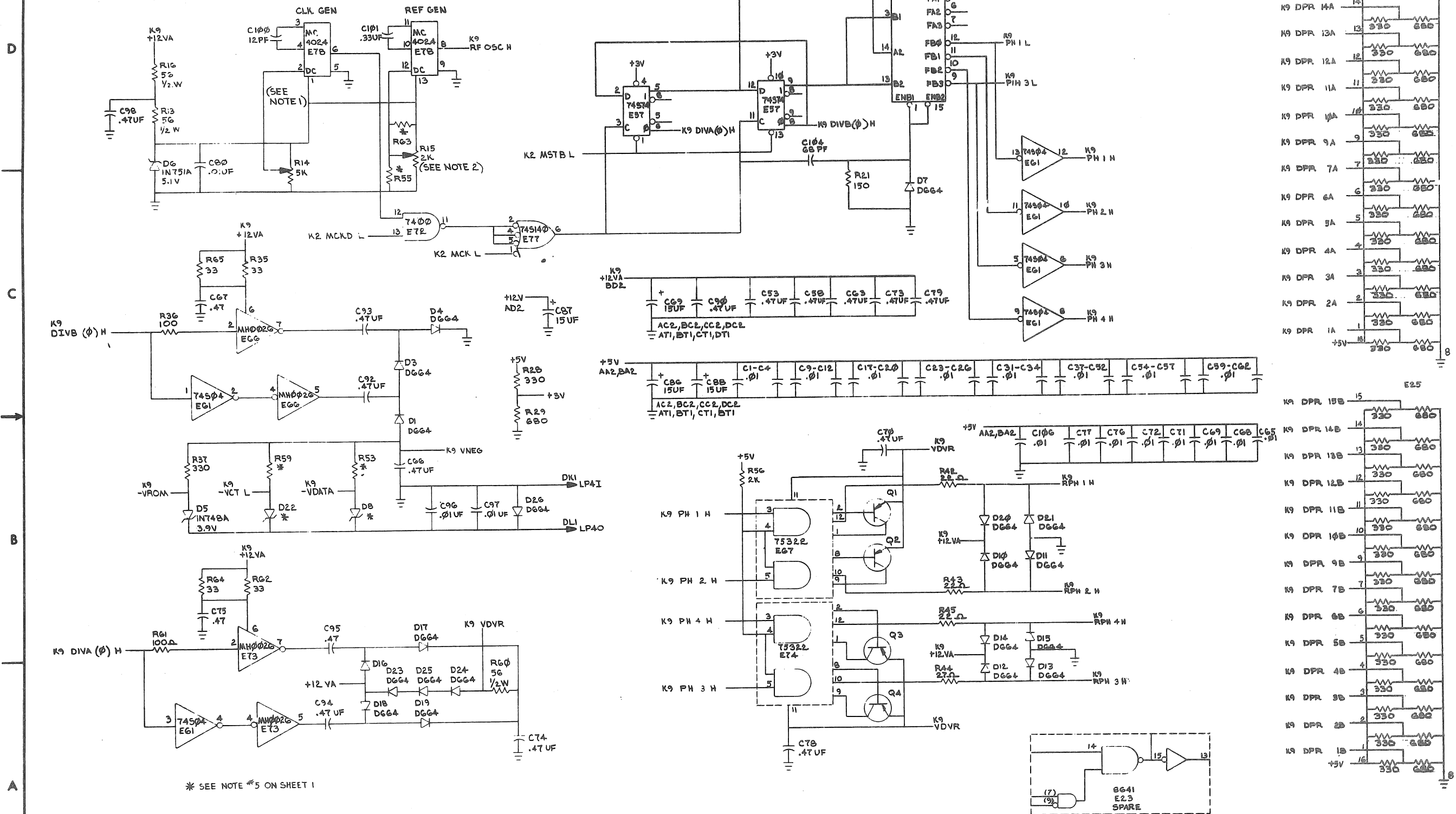
C

W

B

TITLE		LSI-II CPU MODULE (K8)		SIZE	CODE	NUMBER		REV.
				D	CS	M7264-0-1		W
SCALE	1/1	SHEET	9	OF	10	DIST.		

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REVISIONS								TITLE		SIZE CODE	NUMBER	REV.
CHK	CHANGE NO.	REV.							LSI-II CPU MODULE (K9)	DCS	M7264-0-1	W
									SCALE	SHEET	10	OF 10
										DIST.		
DEC FORM NO.			7	6	5	4	3	2	1	1		

[illegible]

DEC FORM DEC 16 (325)-1031-N877
CRA 110

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY / VARIATION															
PARTS LIST																			
MADE BY Liz Hevesh		CHECKED R. OLSEN		SECTION															
DATE 1/19/76		DATE 2-76		ISSUED SECT.															
ENG <i>Richard Hevesh</i>		PROD R. OLSEN																	
DATE 1/27/76		DATE 2-6																	
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION																	
1	MP-0049	CUSTOMER PRINT SET KD11-F		1															
2	DEC11-DVKAA-A-PB	BASIC INSTRUCTION TEST (PAPER TAPE)		*															
3	DEC11-DVKAD-A-PB	TRAP TEST (PAPER TAPE)		*															
4	DEC11-DZKMA-A-PB	MOS/CORE MEMORY TEST (PAPER TAPE)		*															
5	EK LSI-11 TM	LSI-11, PDP-11/03 USER'S MANUAL		*															
6	EB-04870-75	LSI-11 PDP-11/03 PROCESSOR HANDBOOK		*															
7	EH-04779-75	LSI-11 PROGRAMMING CARD		*															
8	EB-06583-76	MICROCOMPUTER HANDBOOK		*															
9	DEC11-DVKAA-A-D	BASIC INSTRUCTION TEST DOCUMENT		*															
10	DEC11-DVKAD-A-D	TRAP TEST DOCUMENT		*															
11	DEC11-DZKMA-A-D	MOS/CORE MEMORY TEST DOCUMENT		*															
		*NOTE: These items are shipped with first																	
		ship to customer.																	
TITLE		ASSY NO.		SIZE CODE		NUMBER				REV.		ECO NO.							
SHIPPING LIST KD11-F				A PL		KD11-F-1				A		KD11-F-00003							
		SHEET 1 OF 1		DIST.															

