

digital

KGII-A
Engineering Drawings
Digital Equipment Corporation

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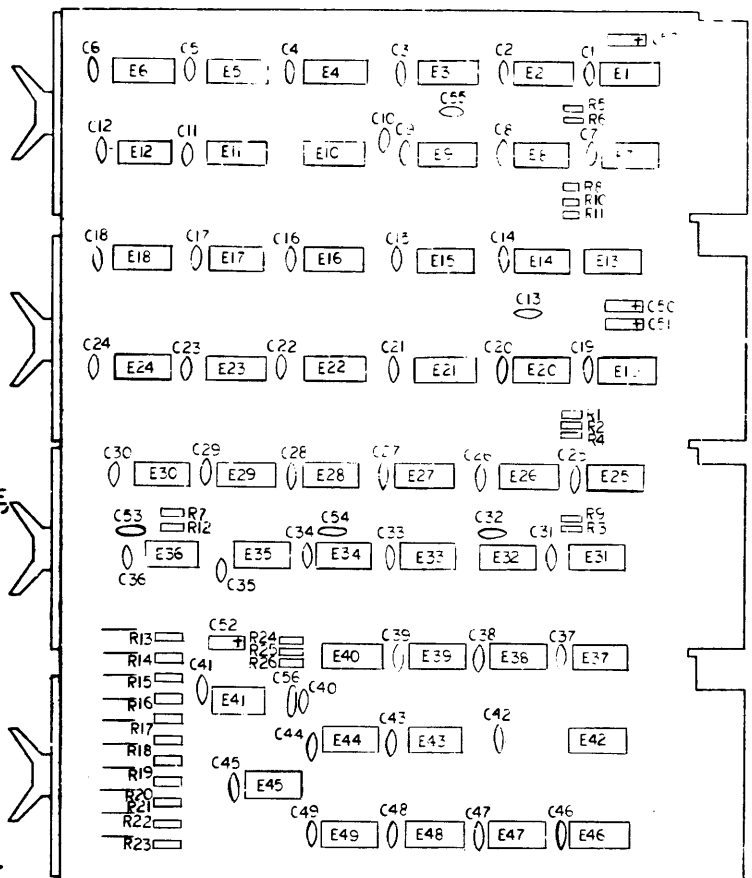
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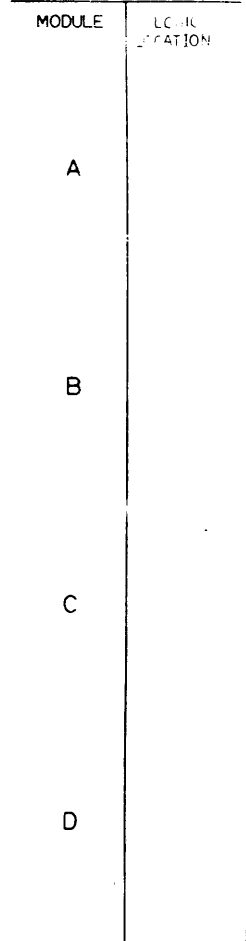
PARTS REFERENCE

ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1.	E1, E4, E14	IC DEC 74H50	1909060	3
2.	E2, E3, E14, E20, E30, E37, E38, E39, E44, E48	IC DEC 8640	19-11216-9	10
3.	E1, E4, E7, E15, E16, E21, E22, E27	IC DEC 8271	1909815	9
4.	E28	IC DEC 74H74	1909857	7
5.	E1, E7, E17, E18, E25, E26, E41	IC DEC 8881	1909705	7
6.	E40, E42, E49	IC DEC 8242	1909712	3
7.	E46, E47	IC DEC 8815	1909718	2
8.	E29	IC DEC 7416	1909828	1
9.	E5, E17, E22, E33	IC DEC 74H04	1909834	4
10.	S11	IC DEC 8266	1909834	1
11.	E12, E28	IC DEC 7428	1910011	2
12.	E32	IC DEC 74197	1910035	1
13.	E43	IC DEC 7402	1909004	1
14.	E18, E31, E42	IC DEC 74H00	1909056	3
15.	E35	IC DEC 74H00	1909057	1
16.	C53, C54	CAP 120PF 100V 5%	1000018	1
17.	C56	CAP 470PF 100V 5%	1000024	1
18.	C50, C52, C57	CAP 6.8MF 35V 20%	1000057	4
19.	C1 - C49, C55	CAP .01 MF 100V 20%	1001616	50
20.	R26	RES 100 1/4W 5%	1000228	1
21.	R7, R12	RES 220 1/4W 5%	1000271	1
22.	R6, R9	RES 330 1/4W 5%	1000284	6
23.	R13 - R25	RES 1K 1/4W 5%	1000164	14
24.	R1 - R5, R8, R10, R11	RES 750 1/4W 5%	130-401	8

COMPONENT PLACEMENT



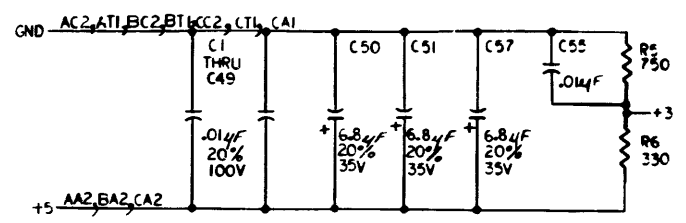
PIN NOMENCLATURE



NOTES:

1. DETAILS ON COMPONENTS ARE NOTED IN THE PARTS REFERENCE. PLACEMENT IS NOTED IN THE COMPONENT PLACEMENT DIAGRAM.
2. GND AND +5V ARE USUALLY PIN 7 AND PIN 14, RESPECTIVELY. EXCEPTIONS ARE:

IC TYPE	GND	+5V
DEC 74H74	PIN 11	PIN 4
DEC 74H50	PIN 11	PIN 4
DEC 74H04	PIN 11	PIN 4
DEC 8271	PIN 8	PIN 16
DEC 8640	PIN 1	PIN 8
3. UNLESS OTHERWISE NOTED: RESISTANCE IS IN OHMS, CAPACITANCE IS IN PICOFARADS. CAPACITORS WITHOUT ANY NOTED VALUES ARE .01 MFD.
4. DEC 8640 REPLACES OBSOLETE DEC 380



REV	DATE	BY	CHK
1	7/2/73	R. L. S. E.	
2	7/2/73	R. L. S. E.	
3	7/2/73	R. L. S. E.	
4	7/2/73	R. L. S. E.	
5	7/2/73	R. L. S. E.	
6	7/2/73	R. L. S. E.	
7	7/2/73	R. L. S. E.	
8	7/2/73	R. L. S. E.	

REV	DATE	BY	CHK
1	7/2/73	R. L. S. E.	
2	7/2/73	R. L. S. E.	
3	7/2/73	R. L. S. E.	
4	7/2/73	R. L. S. E.	
5	7/2/73	R. L. S. E.	
6	7/2/73	R. L. S. E.	
7	7/2/73	R. L. S. E.	
8	7/2/73	R. L. S. E.	

PARTS LIST
 QTY DESCRIPTION PART NO ITEM NO
 UNLESS OTHERWISE SPECIFIED
 DIMENSIONS IN INCHES
 TOLERANCES
 DECIMALS FRACTIONS ANGLES
 = .005 ± .001 ± .010
 = .005 ± .001 ± .010
 REMOVE BURRS AND BREAK SHARP CORNERS
 MATERIAL
 FINISH
 SCALE
 SHEET 1 OF 4
 digital EQUIPMENT CORPORATION
 TITLE
 X-CORNER CLOCK CHECK OPTION
 SIZE/COOL DCS M725-3-1
 NUMBER
 REV E

1. All dimensions and specifications herein are the property of Digital Equipment Corporation and shall not be copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES

1. FUNCTION (FUNCTION REG) DATA BITS

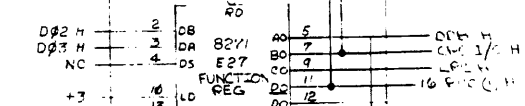
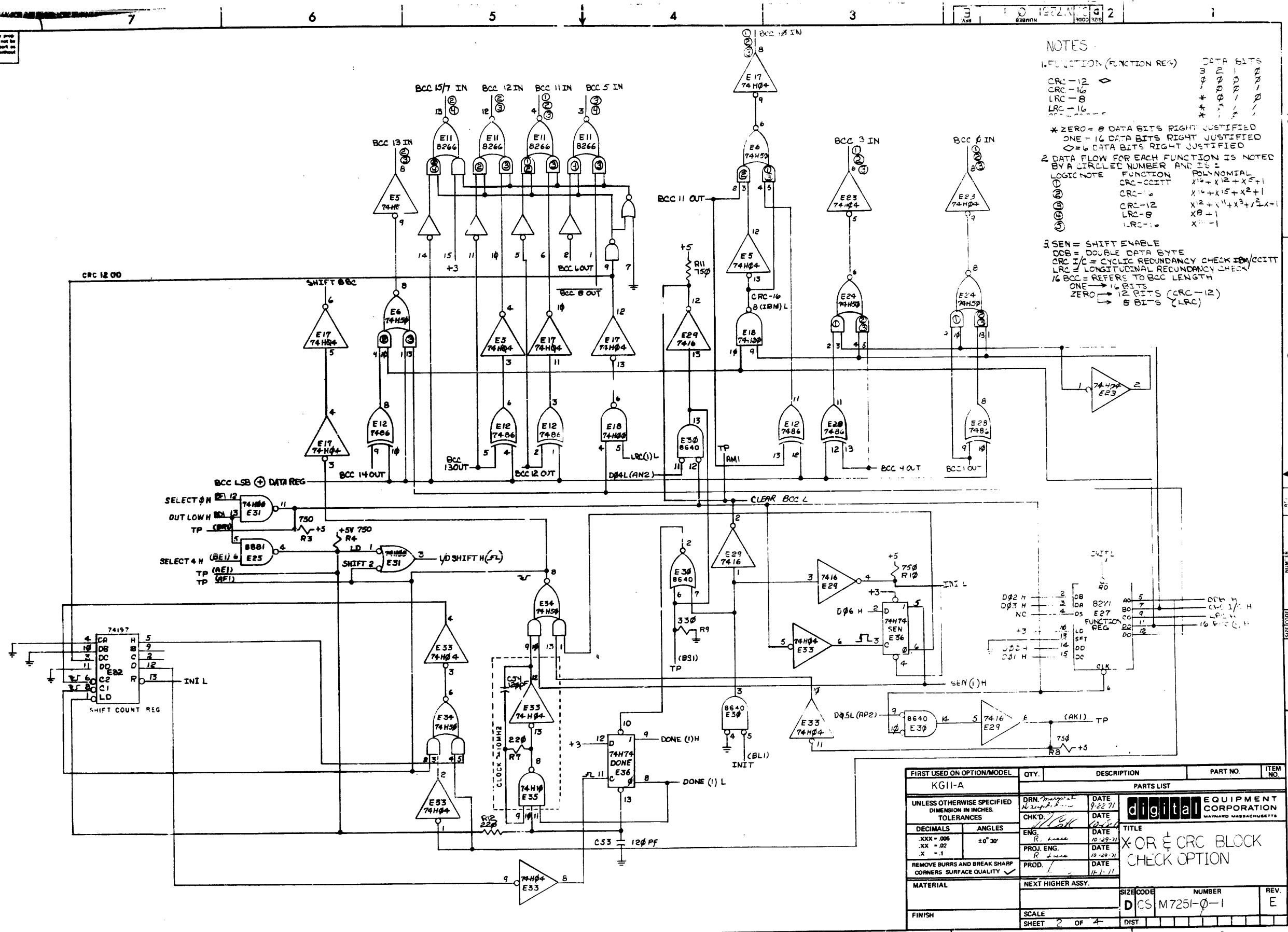
CRC-12	12
CRC-16	16
LRC-8	8
LRC-16	16

* ZERO = 8 DATA BITS RIGHT JUSTIFIED
 ONE = 16 DATA BITS RIGHT JUSTIFIED
 ○ = 6 DATA BITS RIGHT JUSTIFIED

2. DATA FLOW FOR EACH FUNCTION IS NOTED BY A CIRCLED NUMBER AND IS - LOGIC NOTE FUNCTION POLYNOMIAL

①	CRC-CCITT	$X^{16} + X^{12} + X^5 + 1$
②	CRC-16	$X^{16} + X^{15} + X^2 + 1$
③	CRC-12	$X^{12} + X^{11} + X^3 + X + 1$
④	LRC-8	$X^8 + 1$
⑤	LRC-16	$X^{16} + 1$

3. SEN = SHIFT ENABLE
 DDB = DOUBLE DATA BYTE
 CRC = CYCLIC REDUNDANCY CHECK (CCITT)
 LRC = LONGITUDINAL REDUNDANCY CHECK
 16 BCC = REFERS TO BCC LENGTH
 ONE → 16 BITS
 ZERO → 12 BITS (CRC-12)
 → 8 BITS (LRC)



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KG11-A		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN. <i>[Signature]</i>	DATE 9-22-71	 digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS	CHK'D. <i>[Signature]</i>	DATE 10-29-71		
XXX = .005	ENG. <i>[Signature]</i>	DATE 10-29-71		
.XX = .02	PROJ. ENG. <i>[Signature]</i>	DATE 10-29-71		
.X = .1	PROD. <i>[Signature]</i>	DATE 11-1-71		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH	SCALE		D CS	M7251-0-1
	SHEET 2 OF 4		DIST.	

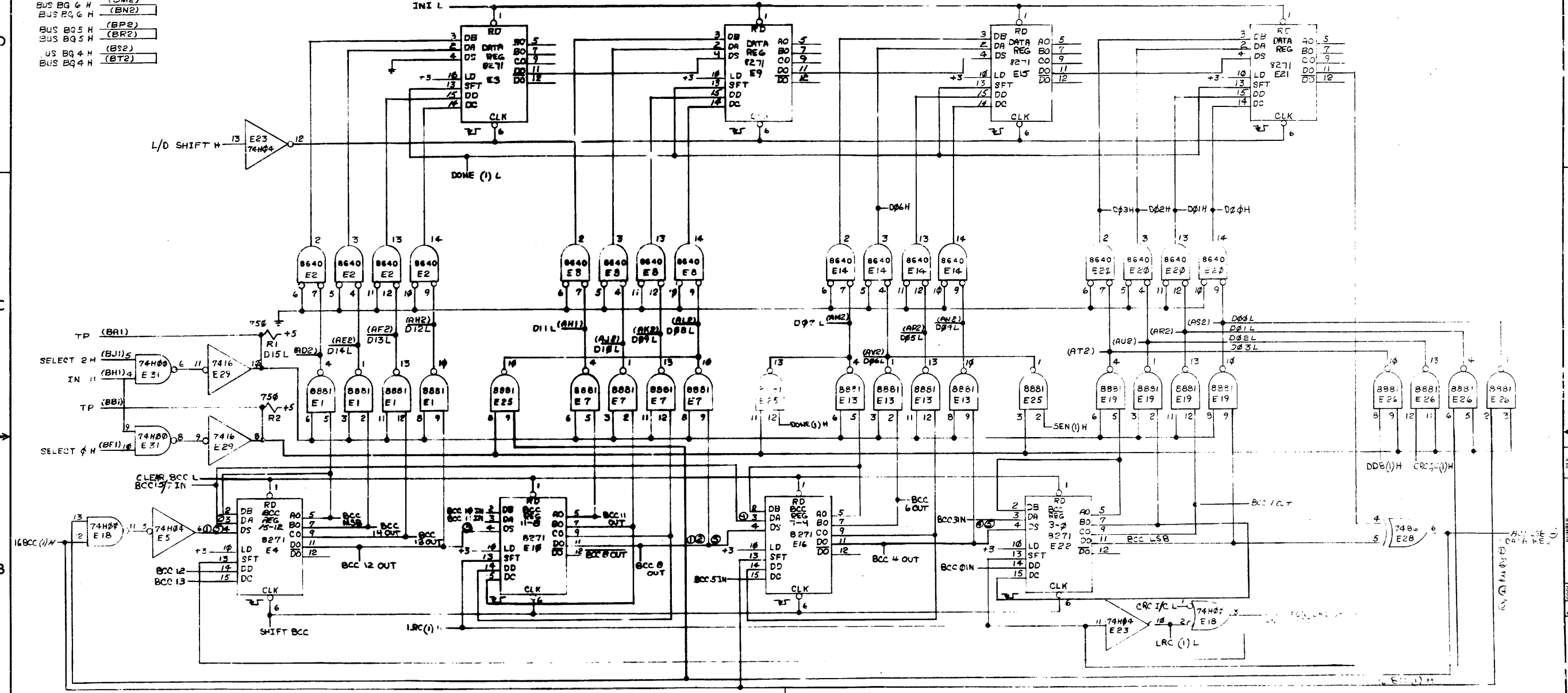
REV.	
CHG.	
REVISIONS	
CHANGE NO.	

SIZE CODE NUMBER
 DCS M7251-0-1

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- BUS BQ 7 H (BK2)
- BUS BQ 7 H (BL2)
- BUS BQ 6 H (BM2)
- BUS BQ 5 H (BP2)
- BUS BQ 5 H (BR2)
- BUS BQ 4 H (BS2)
- BUS BQ 4 H (BT2)

NOTES:
1. SFT = L = PARALLEL ENTER
SFT = H = SHIFT REGISTER

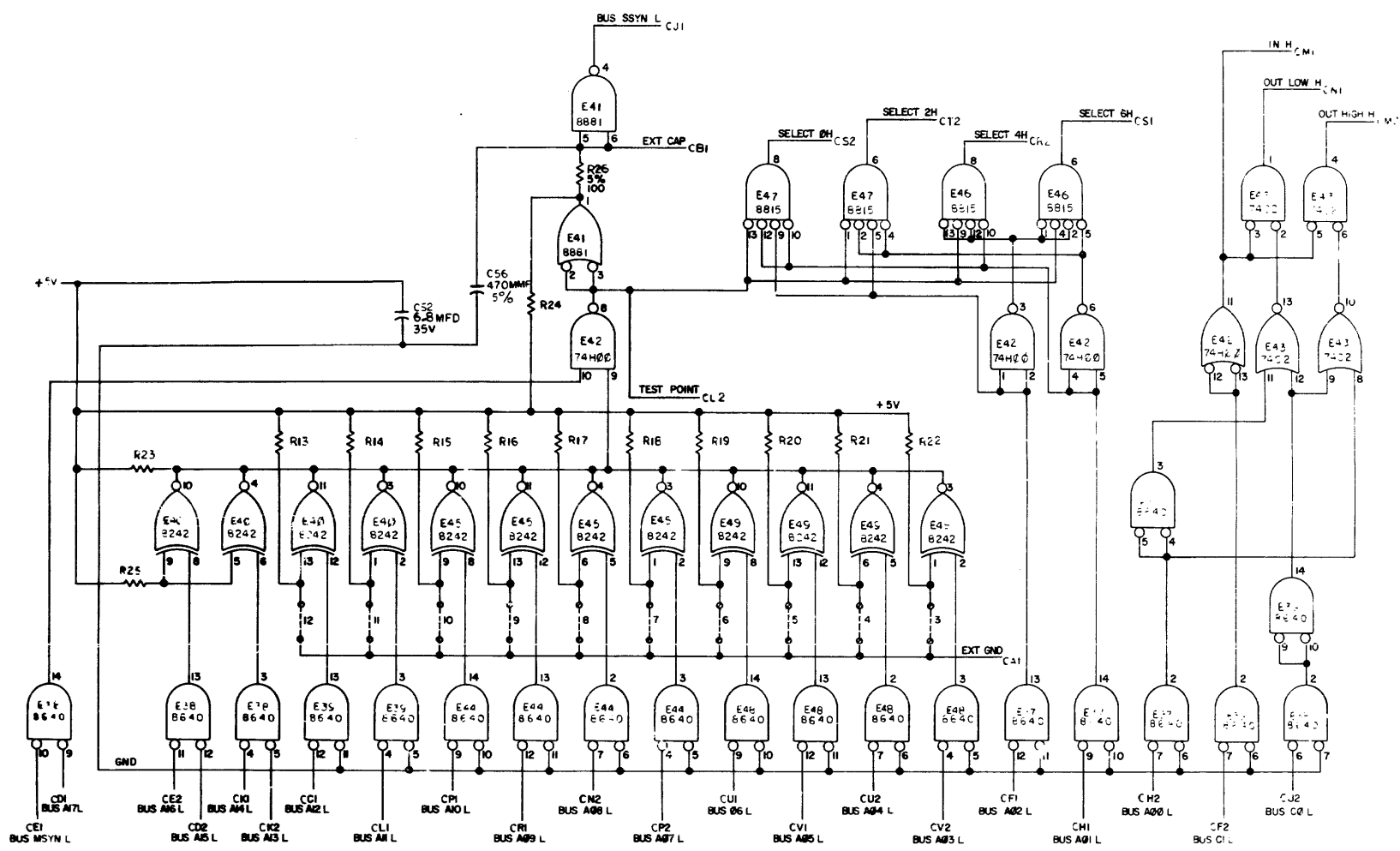


REV	NO	DATE	BY	CHK

DEC FORM NO. DRD 100-A

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
K311-1				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN	DATE	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	CHKD	DATE		
ANGLES	ENG	DATE		
XXX - 000 XX - 02 X - 1	PROJ ENG	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD.	DATE	TITLE	
MATERIAL	NEXT HIGHER ASSY		SIZE CODE	NUMBER
FINISH	SCALE		D	K311-0-1
	SHEET	OF 4	DIST	

1. All dimensions are in inches unless otherwise specified.
 2. All dimensions are to be held unless otherwise specified.
 3. All dimensions are to be held unless otherwise specified.
 4. All dimensions are to be held unless otherwise specified.
 5. All dimensions are to be held unless otherwise specified.
 6. All dimensions are to be held unless otherwise specified.
 7. All dimensions are to be held unless otherwise specified.
 8. All dimensions are to be held unless otherwise specified.



D
C
B
A

C
B
A

REV	
CHANGE NO	
CHK	

FIRST USE ON OTHER WORK		QTY.	DESCRIPTION	PART NO.	ITEM NO.
KGI-1-A					
PARTS LIST					
DO NOT SCALE DRAWING	DRN.	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS TITLE XOR CHECK BLOCK CHECK OPTION SIZE CODE NUMBER REV. DCS M7251-7-1 E		
UNLESS OTHERWISE SPECIFIED	CHK'D.	DATE			
TOLERANCES	ENG.	DATE			
DECIMALS FRACTIONS ANGLES	PROJ. ENG.	DATE			
± .008 ± 1/64 ± 0°30'	PROD.	DATE			
FINAL SURFACE QUALITY	NEXT HIGHER ASSY		SCALE		
REMOVE BURRS AND BREAK SHARP CORNERS	FINISH		SHEET OF		

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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS						
ENGINEERING SPECIFICATION					DATE 11-30-71	
TITLE KG11-A TEST SPECIFICATION						
REVISIONS						
REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE

ENG	Remi Lisee	APPD	R. Lisee	SIZE	A	CODE	SP	NUMBER	KG11-A-3	REV
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DEC FORM NO.
DRA 107

SHEET 1 OF 2

ENGINEERING SPECIFICATION				CONTINUATION SHEET
TITLE KG11-A TEST SPECIFICATION				
<p><u>GENERAL</u></p> <p>This specification establishes the test procedure by which production tests the KG11-A for shipment to the end user.</p> <p>1.0 Hardware Requirements (Minimum)</p> <ul style="list-style-type: none">1 PDP-11 with \geq 4K core1 DD11-A standard peripheral system unit1 KG11-A module (M7251)1 Heat Chamber [Test temp is: a) 50°C, b) Room temp.] <p>2.0 Software Requirements</p> <ul style="list-style-type: none">1 MAINDEC-11-D8KA <p>3.0 Procedure</p> <ul style="list-style-type: none">a) assemble hardware. Note that the DD11-A is a requirement for checkout, but is not a requirement for shipment (i.e. the DD11-A is a prerequisite to the KG11-A but not a co-requisite to shipment).b) Load and operate MAINDEC-11-D8KA per MAINDEC procedures.c) Each pass requires approximately two minutes (PDP-11/20) and five passes with heat (a) and five passes without heat (b) is considered a valid test.				

	SIZE	CODE	NUMBER	REV
	A	SP	KG11-A-3	

DEC FORM NO DFC 16-(381)-1022-N370
DRA 108

SHEET 2 OF 2