

PARTS REFERENCE

ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1	E23	DEC 74H50N	1909060	2
2	E5, E10, E28, E37	DEC 7402N	1909004	5
3	E9	DEC 74H74N	1909667	2
4	E25, E26, E29, E38, E43, E50, E54	DEC 74H40N	1905586	8
5	E7, E11, E19, E20, E31, E49	DEC 7400N	1905575	6
6	E8	DEC 8881	1909705	1
7	E12, E14, E18, E39, E40, E41, E42, E44, E53	DEC 74H00N	1909056	9
8	E13, E15, E24, E34	DEC 74H10N	1909057	4
9	E16	DEC 74H20N	1905635	1
10	E17, E47, E48	DEC 74H30N	1909059	3
11	E21, E51	DEC 7410N	1905576	2
12	E22, E46	DEC 8815A	1909713	2
13	E27, E30, E45	DEC 8271	1909615	2
14	E32, E33, E35, E36	8251B	1909594	4
15	E52	DEC 7420N	1905577	1
16	C1-C10, C13, C15-C27, C29-C55, C59	.01 MFD, 100V, 20% CAP	1001610	52
17	C11, C60	330 MMFD, 100V, 5% CAP	1000023	2
18	C12	18 MMFD, 100V, 5% CAP	1002608	1
19	C14	150 MMFD, 100V, 5% CAP	1000009	1
20	C56-C58, C28	6.8 MFD, 35V, 20% CAP	1000067	4
21	R1	300, 1/4W, 5% RES	1301425	1
22	R2, R4, R7, R10	1000, 1/4W, 5% RES	1300365	4
23	R3	47, 1/4W, 5% RES	1300202	1
24	R5	470, 1/4W, 5% RES	1300316	1
25	R6, R9	220, 1/4W, 5% RES	1300271	2
26	R8	5000 OHM POTENTIOMETER	1305451	1
27	D1	D664 DIODE	1100114	1
28	Q1	DEC 3009B TRANSISTOR	1503100	1

NOTES:

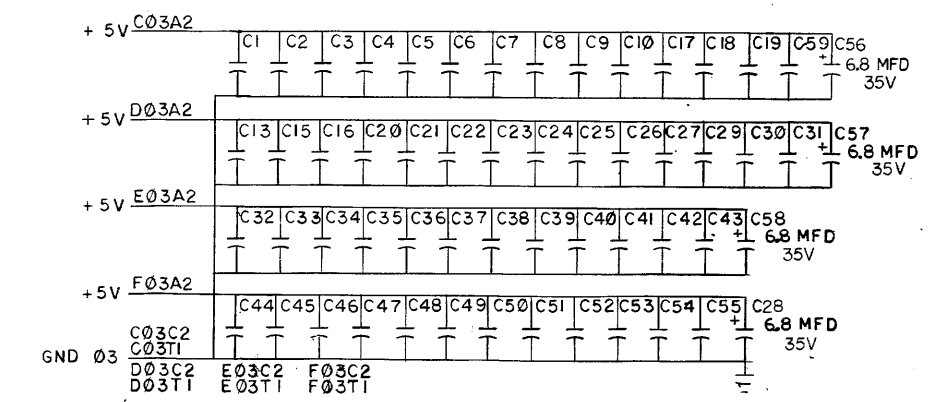
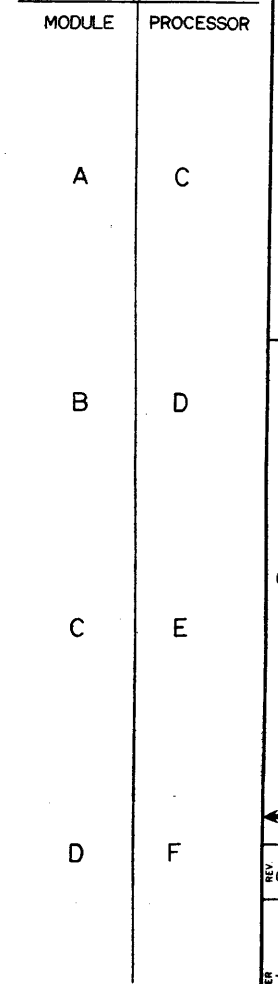
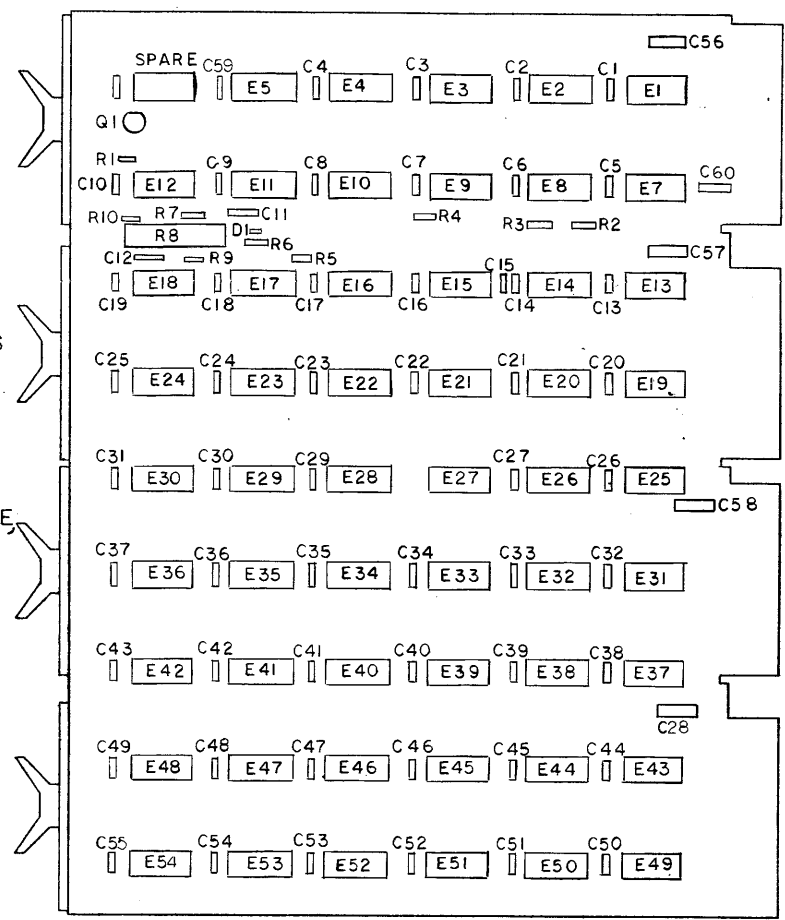
- PIN NOTATION THROUGHOUT IS ORDERED UPON MODULE PLACEMENT IN THE KAI1 PROCESSOR. MODULE REFERENCE ALONE IS OBTAINED BY DELETING THE NUMBER (SLOT LOCATION) AFTER THE FIRST LETTER, AND CONVERTING THE FIRST LETTER ACCORDING TO THE PIN NOMENCLATURE CHART AT RIGHT.
- ALL SIGNALS THAT HAVE MODULE PINS ARE SO NOTED; MULTIPLE NOTATIONS OF THE SAME SIGNALS WITHIN A MODULE HAVE THE PIN NOTED ON EACH. AN INPUT SIGNAL IS NOTED ONLY ONCE PER SHEET UNLESS SEPERATE PINS ARE USED; MULTIPLE INPUTS ARE CONNECTED. MODULE OUTPUT SIGNALS ARE BROUGHT TO THE EXTREME RIGHT OF EACH SHEET.
- PROCESSOR SIGNAL SOURCE NOTATION (K10-2, FOR EXAMPLE) IDENTIFIES THE SIGNAL SOURCE (PRINT AND MODULE). THE FIRST NUMBER AFTER THE K INDICATES THE MODULE PRINT SET, WHILE THE SECOND INDICATES THE SHEET WITHIN THE SET. IF ON A PRINT, THE FIRST NUMBER OF THE K PREFIXES COINCIDE FOR A SIGNAL NAME AND THE PRINT (SEE TITLE BLOCK), THE SIGNAL IS GENERATED ON THE MODULE. A DIFFERENCE IN THE FIRST NUMBER OF THE K PREFIXES INDICATES A SIGNAL GENERATED OFF THE MODULE. SIGNALS WITH A "BUS" PREFIX REPRESENT A "WIRED OR" SITUATION, AND MULTIPLE SOURCES FOR THE SIGNAL CAN EXIST.
- DETAILS ON COMPONENTS ARE NOTED IN THE PARTS REFERENCE. PLACEMENT IS NOTED IN THE COMPONENT PLACEMENT DIAGRAM.
- GND AND +5V ARE USUALLY PIN 7 AND PIN 14, RESPECTIVELY. EXCEPTIONS ARE:

IC TYPE	GND	+5V
DEC 7481	PIN 10	PIN 4
DEC 7482	PIN 11	PIN 4
8251	PIN 8	PIN 16
DEC 8271	PIN 8	PIN 16
DEC 380	PIN 1	PIN 8
DEC 384	PIN 1	PIN 8

6. UNLESS OTHERWISE NOTED: RESISTANCE IS IN OHMS; CAPACITANCE IS IN PICOFARADS. CAPACITORS WITHOUT ANY NOTED VALUES ARE .01 MFD.

COMPONENT PLACEMENT

PIN NOMENCLATURE

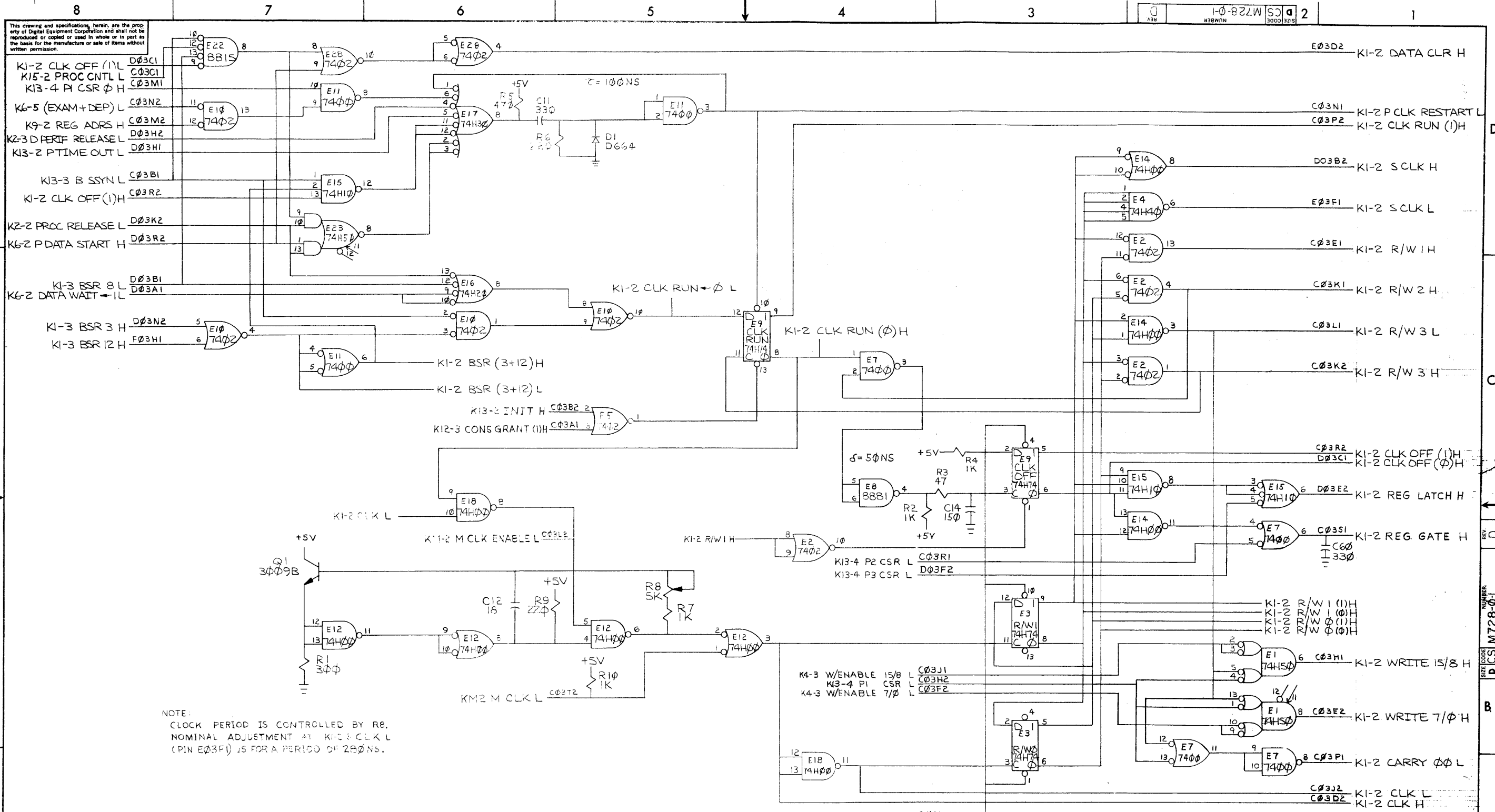


REVISIONS

REV	CHANGE NO	DATE	BY	APP
B	00001	7-22-70	J.O'LOUGHLIN	
C	00003	4/23/70	J.O'LOUGHLIN	
D	00004	7-23-70	J.O'LOUGHLIN	
E	00005	7-24/70	J.O'LOUGHLIN	

FIRST USED ON OPTION/MODEL PDP 11	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED		CHKD: R Hillan	DATE: 2/17/70	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
UNLESS OTHERWISE SPECIFIED		DATE: 3-2-70		
DIMENSION IN INCHES		ENG: J. O'Loughlin	DATE: 3-6-70	TITLE: TIMING & STATES
TOLERANCES		PROL ENG: J. O'Loughlin	DATE: 3-6-70	M728 KI-1
DECIMALS FRACTIONS ANGLES		PROD. DATE:		SIZE CODE: DCS M728-0-1
± .005 ± 1/64 ± 0°30'				NUMBER: 1
FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS				REV. D
MATERIAL: + + +	NEXT HIGHER ASSY: A-ML-KAI-0	SCALE: 1 OF 4	ETCH REV: B C D	
FINISH: + + +				

REV D
NUMBER M728-0-1
SIZE CODE DCS

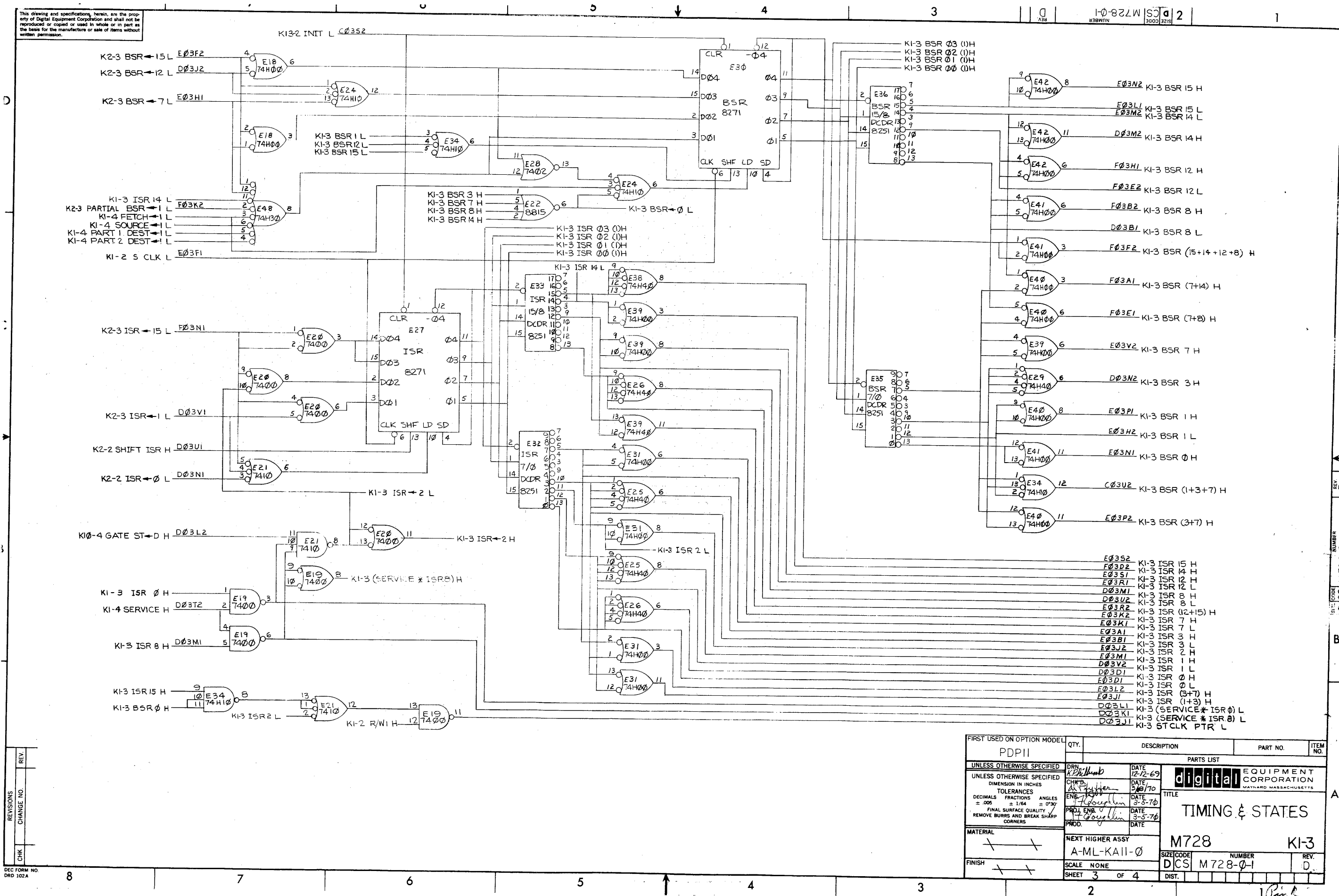


NOTE:
CLOCK PERIOD IS CONTROLLED BY R8.
NOMINAL ADJUSTMENT AT KI-2 CLK L
(PIN E03F1) IS FOR A PERIOD OF 280NS.

REV.	CHANGE NO.

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED	DRN.	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
UNLESS OTHERWISE SPECIFIED	CHK'D.	DATE	TITLE	
TOLERANCES	ENG.	DATE	TIMING & STATES	
DECIMALS FRACTIONS ANGLES	PRD.	DATE	M728 KI-2	
± .005 ± .005 ± .005	PROD.	DATE	SCALE NONE	
FINAL SURFACE QUALITY			SIZE CODE NUMBER REV.	
REMOVE BURRS AND BREAK SHARP CORNERS			DCS M728-0-1 DI	
MATERIAL	NEXT HIGHER ASSY		SCALE NONE	
FINISH			SHEET 2 OF 4	

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REV.	CHANGE NO.

DEC FORM NO. ORD 102A

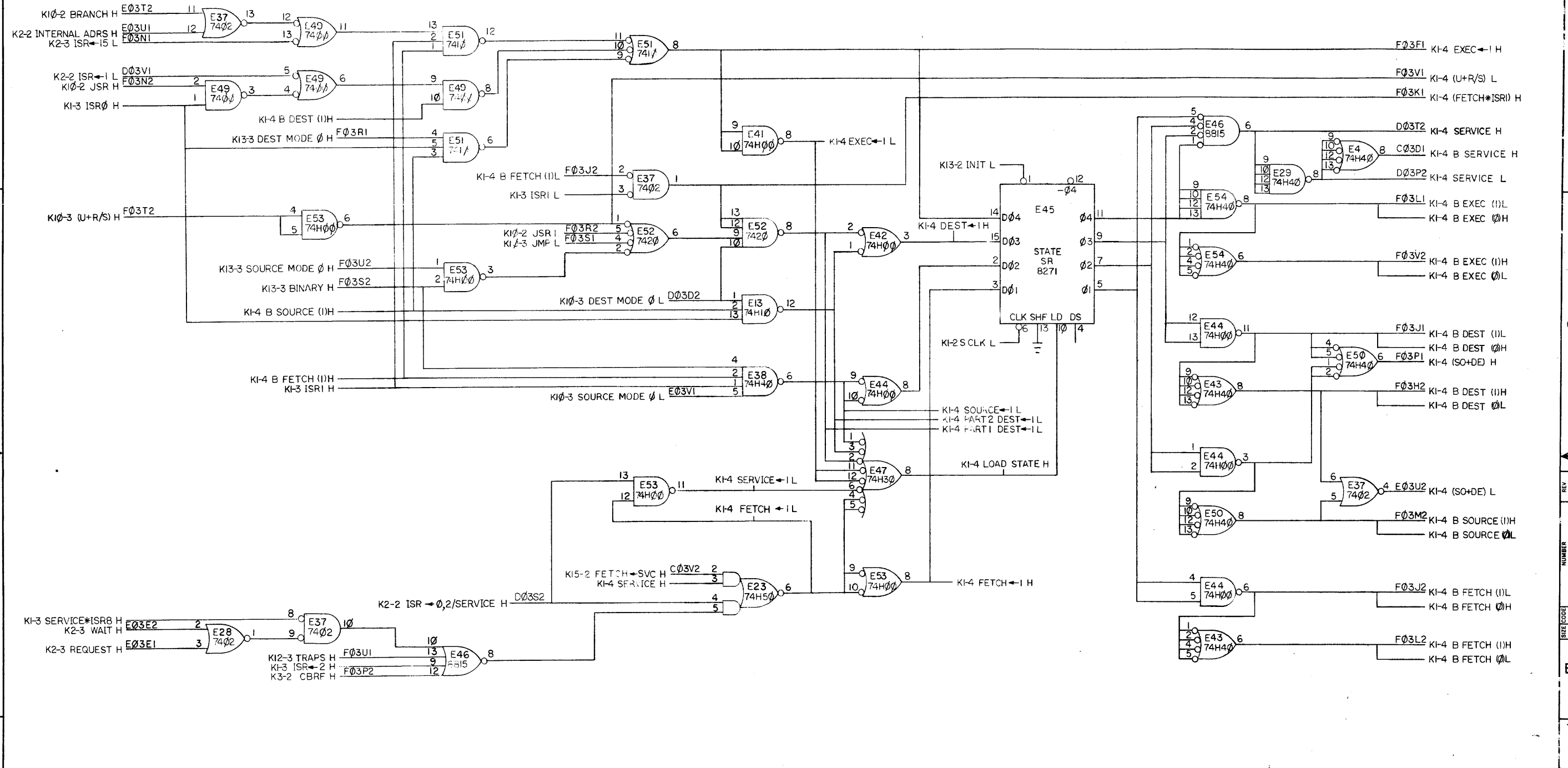
FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11				
UNLESS OTHERWISE SPECIFIED		DRN	DATE	
UNLESS OTHERWISE SPECIFIED		CHK'D	DATE	
DIMENSION IN INCHES		ENG	DATE	
TOLERANCES		PROL ENG	DATE	
DECIMALS FRACTIONS ANGLES		PROD.	DATE	
± .005 ± 1/64 ± 0°30'				
FINAL SURFACE QUALITY				
REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL	NEXT HIGHER ASSY	PARTS LIST		
FINISH	A-ML-KA11-0	digital EQUIPMENT CORPORATION		
	SCALE NONE	TIMING & STATES		
	SHEET 3 OF 4	M728 KI-3		
		SIZE CODE NUMBER		
		DCS M728-01		
		REV. D		

REV. D
NUMBER
DCS M728-01

8 7 6 5 4 3 2 1

100%

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REV.	
CHANGE NO.	
CHK	

FIRST USED ON OPTION/MODEL PDPII	QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED: DRN: <i>Andis</i> DATE: 12-11-69				
UNLESS OTHERWISE SPECIFIED: DIMENSION IN INCHES: CHKD: <i>W. H. H.</i> DATE: 3/10/70				
TOLERANCES: DECIMALS: ± .005; FRACTIONS: ± 1/64; ANGLES: ± 0°30'				
FINAL SURFACE QUALITY: REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL: NEXT HIGHER ASSEMBLY: A-ML-KA11-0				
FINISH: SCALE: SHEET 4 OF 4				
PARTS LIST			TITLE: TIMING & STATES	
M728			KI-4	
SIZE CODE: DCS M728-0-1			REV: D	