

**MM11-F**  
**core memory**  
**engineering drawings**

**MM11-F Core Memory**

D-MU-MM11-F-02	1	Module Utilization
D-BS-MM11-F-03	2	Core Memory Stack
D-BS-MM11-F-04	4	Core Memory Sense & Inhibit
D-BS-MM11-F-05	1	Magnetics Logic Diagram
D-IC-MM11-F-06	1	I/O Connectors
K-WL-MM11-F-07 (complete)	-	Wire List
D-TD-MM11-F-08	1	Timing & Flow
D-CS-G102-0-1	1	Sense Inhibit Card, G102
D-CS-G103-0-1	1	Memory Levels and Gates, G103
B-CS-M1091-0-1	1	Device Select Module, M1091
C-CS-G225-0-1	1	X & Y Current Generator, G225
D-CS-G226-0-1	1	X-Y Decoder Switch, G226
C-CS-G616-0-1	1	Planar Stack Board, G616
D-CS-M7290-0-1	1	MM11-F Control Logic, M7290

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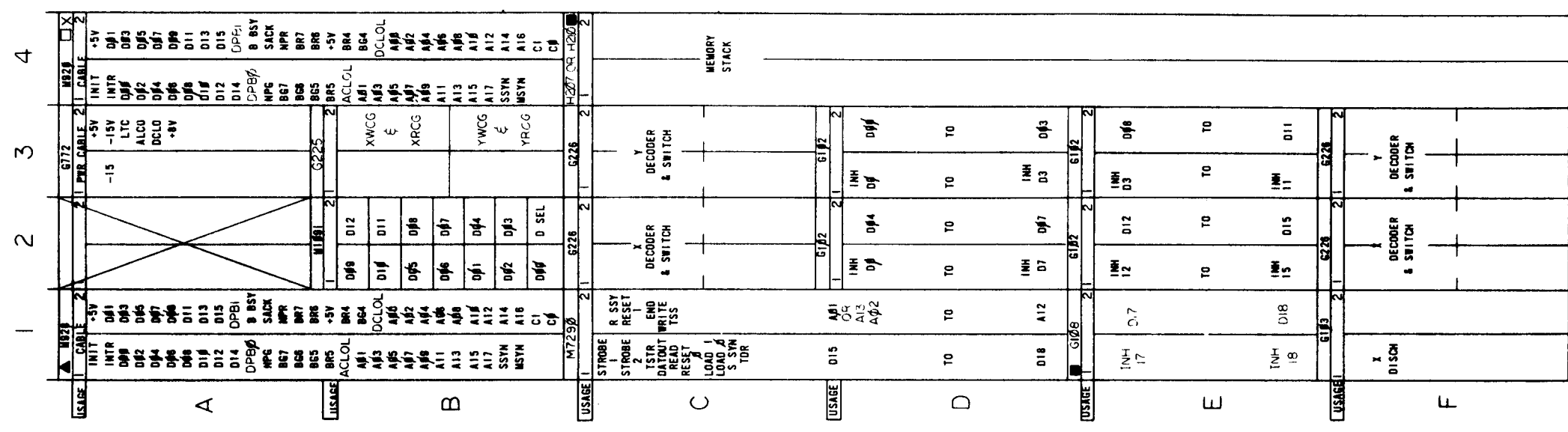
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20-F-111W 2

LEGEND	
NUMBER	VARIATION
MMII-F	SEE PARTS LIST
MMII-FP	SEE PARTS LIST



- IF END OF BUS REPLACE M92 WITH M93.
- ✕ IF LAST UNIT IN BASIC BOX REPLACE M92 WITH BC11A CABLE END WHEN EXPANDING TO PERIPHERAL BOX.
- ▲ IF FIRST UNIT IN EXPANDER BOX REPLACE M92 WITH BC11A CABLE END.
- H207 USED IN MMII-F  
H208 USED IN MMII-FP  
G108 USED IN MMII-FP ONLY

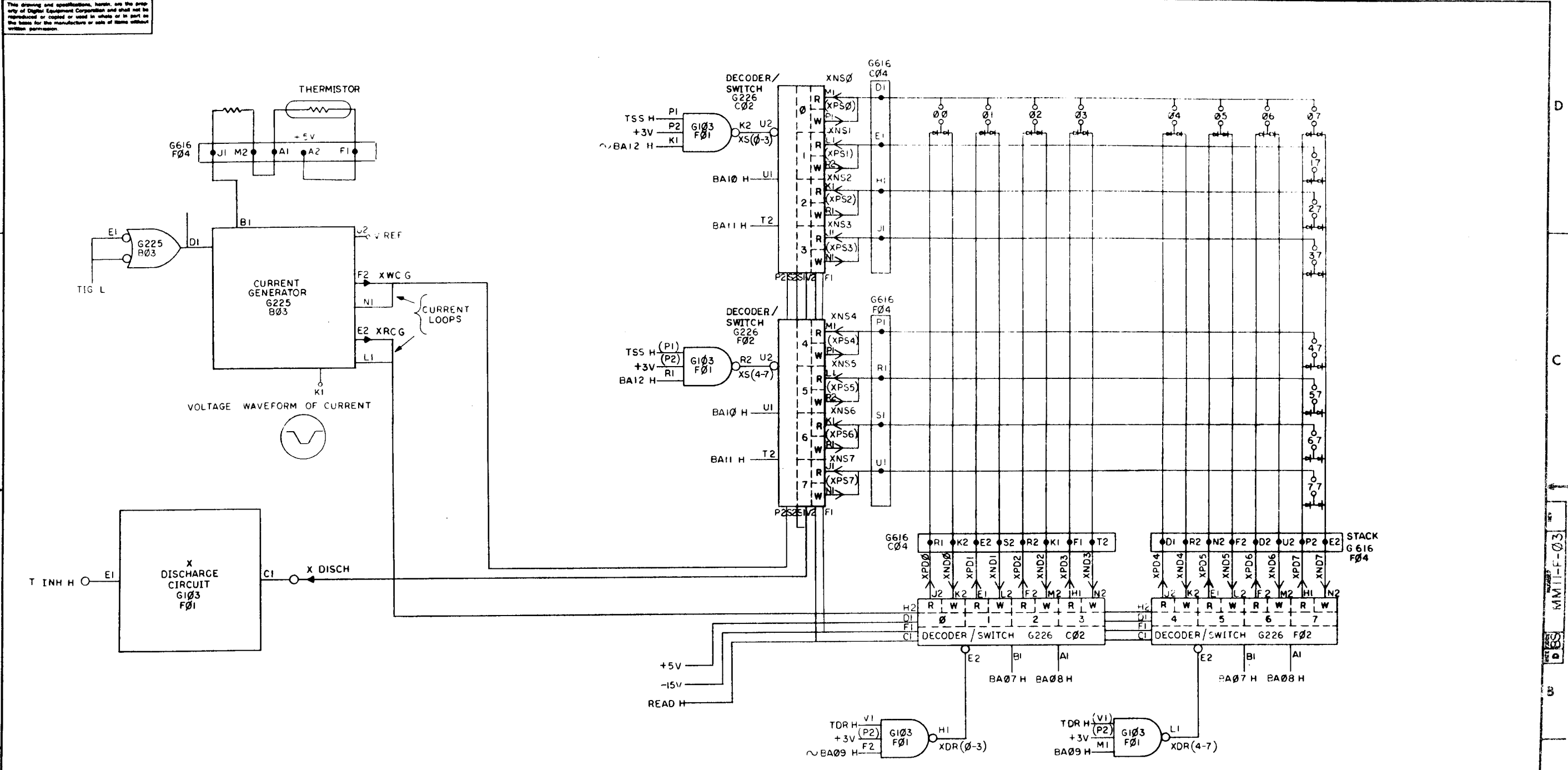
REV.	CHANGE NO.

FIRST USED ON OPTION/MODEL  
PDP11

UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES	DO NOT SCALE DIMENSIONS
TOLERANCES	
DIMENALS FRACTIONS ANGLES	
±.005 @ 1/16" ±.002	
FINAL SURFACE QUALITY	
REMOVE BURRS AND BREAK SHARP CORNERS	
MATERIAL	
FINISH	

QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			
EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS		TITLE <b>MODULE UTILIZATION (MMII-F)</b>	
NEXT HIGHER ASSY A-ML-MMII-F		NUMBER DMU MMII-F-02	
SCALE		SHEET	
OF 1		DIST.	

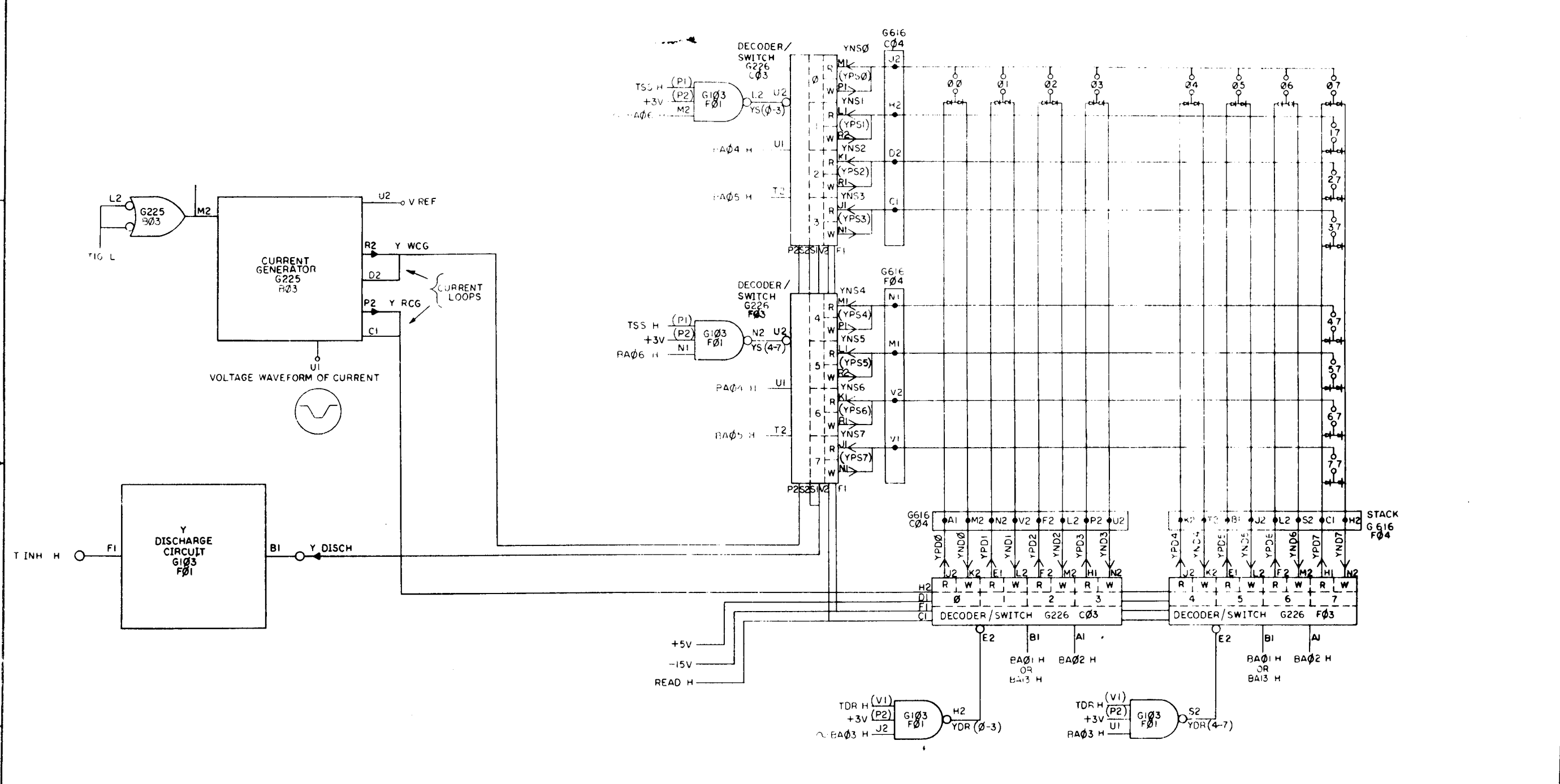
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REV.	CHANGE NO.

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.																																													
PDPII																																																	
PARTS LIST																																																	
<table border="1"> <tr> <td>UNLESS OTHERWISE SPECIFIED</td> <td>DATE</td> <td>1/3/71</td> </tr> <tr> <td>UNLESS OTHERWISE SPECIFIED</td> <td>DATE</td> <td>1/20/71</td> </tr> <tr> <td>UNLESS OTHERWISE SPECIFIED</td> <td>DATE</td> <td>2/2/71</td> </tr> <tr> <td>UNLESS OTHERWISE SPECIFIED</td> <td>DATE</td> <td>2/22/71</td> </tr> <tr> <td>UNLESS OTHERWISE SPECIFIED</td> <td>DATE</td> <td>3/4/71</td> </tr> </table>					UNLESS OTHERWISE SPECIFIED	DATE	1/3/71	UNLESS OTHERWISE SPECIFIED	DATE	1/20/71	UNLESS OTHERWISE SPECIFIED	DATE	2/2/71	UNLESS OTHERWISE SPECIFIED	DATE	2/22/71	UNLESS OTHERWISE SPECIFIED	DATE	3/4/71																														
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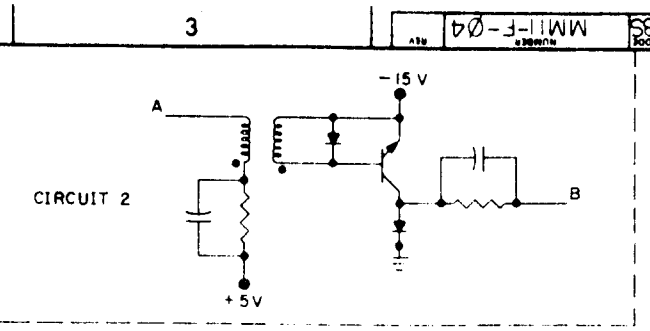
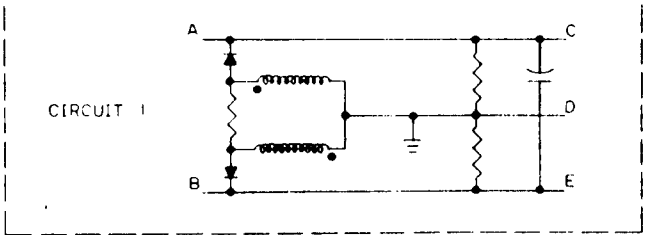
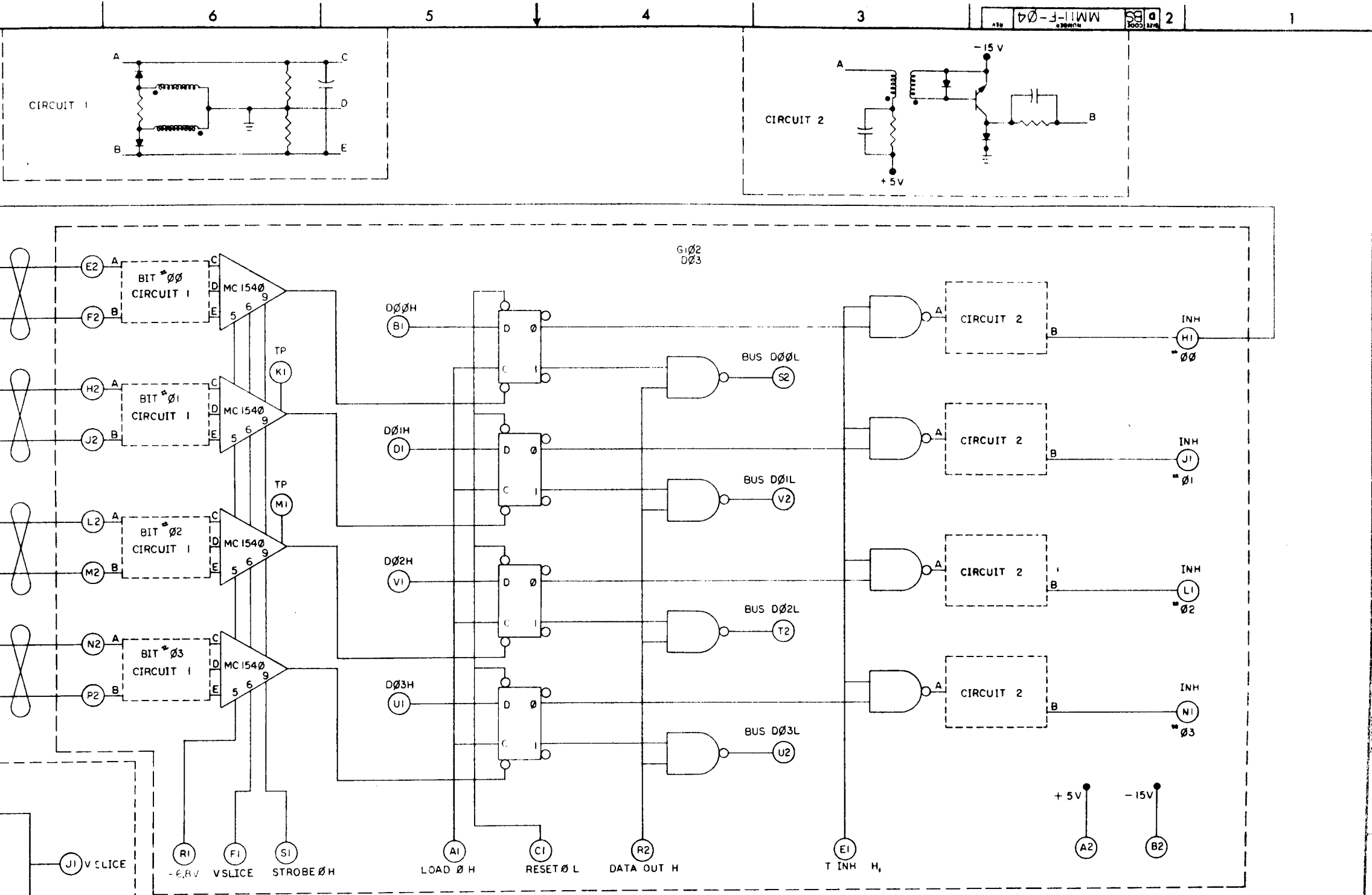


REV	CHANGE NO

DEC FORM NO DWD 1024

FIRST USED ON OPTION/MODEL PDP11	QTY	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED				
UNLESS OTHERWISE SPECIFIED	DATE	PARTS LIST		
DIMENSION IN INCHES	1/13/71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS		
TOLERANCES	DATE	TITLE		
DECIMALS ± .005	7-20-71	CORE, MEMORY STACK (Y DRIVE)		
FRACTIONS ± 1/64	DATE	SIZE CODE NUMBER REV.		
ANGLES ± 0°30'	7-22-71	D BS MM11-F-03		
FINAL SURFACE QUALITY	DATE	SHEET 2 OF 2		
REMOVE BURRS AND BREAK SHARP CORNERS	7/23/71	DST.		
MATERIAL	NEXT HIGHER ASSY	A-ML-MM11-F		
FINISH	SCALE	SCALE 2 OF 2		

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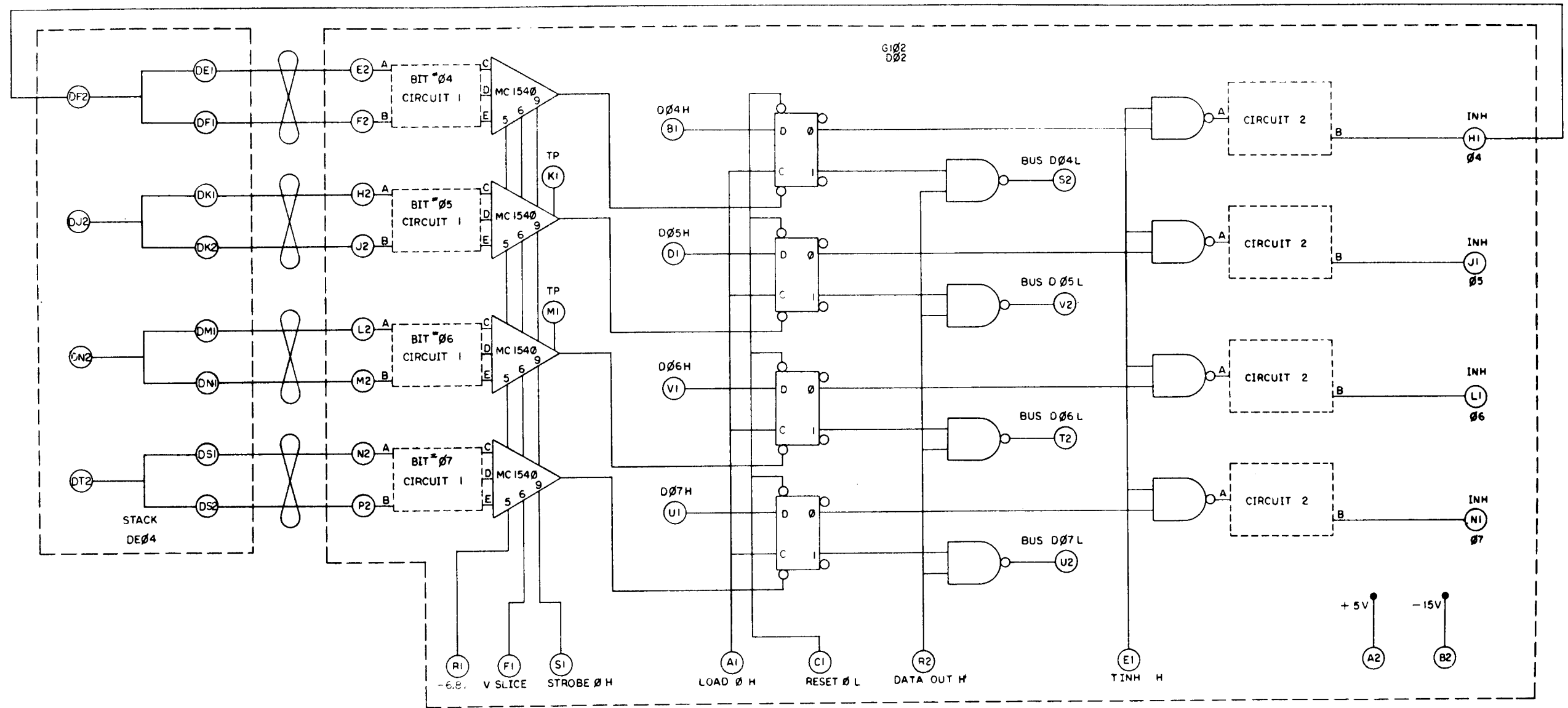
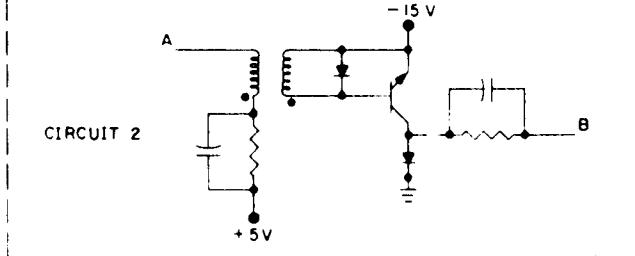
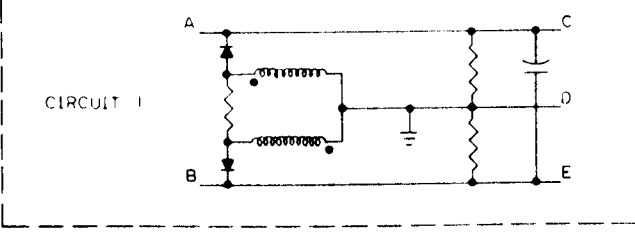


FIRST USED ON OPTION/MOD.	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDPII				
UNLESS OTHERWISE SPECIFIED				
DIMENSION IN INCHES				
TOLERANCES				
DECIMALS FRACTIONS ANGLES				
= .005 ± .004 ± 0°30'				
FINAL SURFACE QUALITY				
REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL				
NEXT HIGHER ASSY				
A-ML-MMII-F				
FINISH				
SCALE				
SHEET 1 OF 4				
PARTS LIST			digital EQUIPMENT CORPORATION	
DATE 11/1/71			DATE 1-2-71	
CHKD: [Signature]			DATE 2-22-71	
ENG: [Signature]			DATE 2-22-71	
PROL. ENG: [Signature]			DATE	
PROD: [Signature]			DATE	
TITLE			CORE MEMORY SENSE & INHIBIT	
SIZE CODE			NUMBER	
DBS			MMII-F-04	
REV.				

REVISIONS  
 CHANGE NO. REV.  
 1 1/8 71 01 002

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8 7 6 5 4 3 2 1



REV	NO
CHANGE	NO
CHK	NO

SEC FORM NO 102A

8 7 6 5 4 3 2 1

FIRST USED ON OPTION/MOD.	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11				
UNLESS OTHERWISE SPECIFIED				
DIMENSIONS IN INCHES				
TOLERANCES				
DECIMALS	FRACTIONS	HOLES		
± .008	± 1/64	± .030		
FINAL SURFACE QUALITY				
REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL	NEXT HIGHER ASSY			
+	A-ML-MM11-F			
FINISH	SCALE	SHEET 2 OF 4		
+		DISTRIBUTION		

**digital** EQUIPMENT CORPORATION  
MAYNARD, MASSACHUSETTS

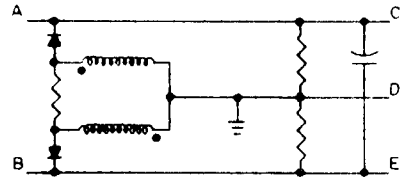
TITLE:  
**CORE MEMORY SENSE & INHIBIT**

SIZE CODE: **DBS** NUMBER: **MM11-F-04** REV: **2**

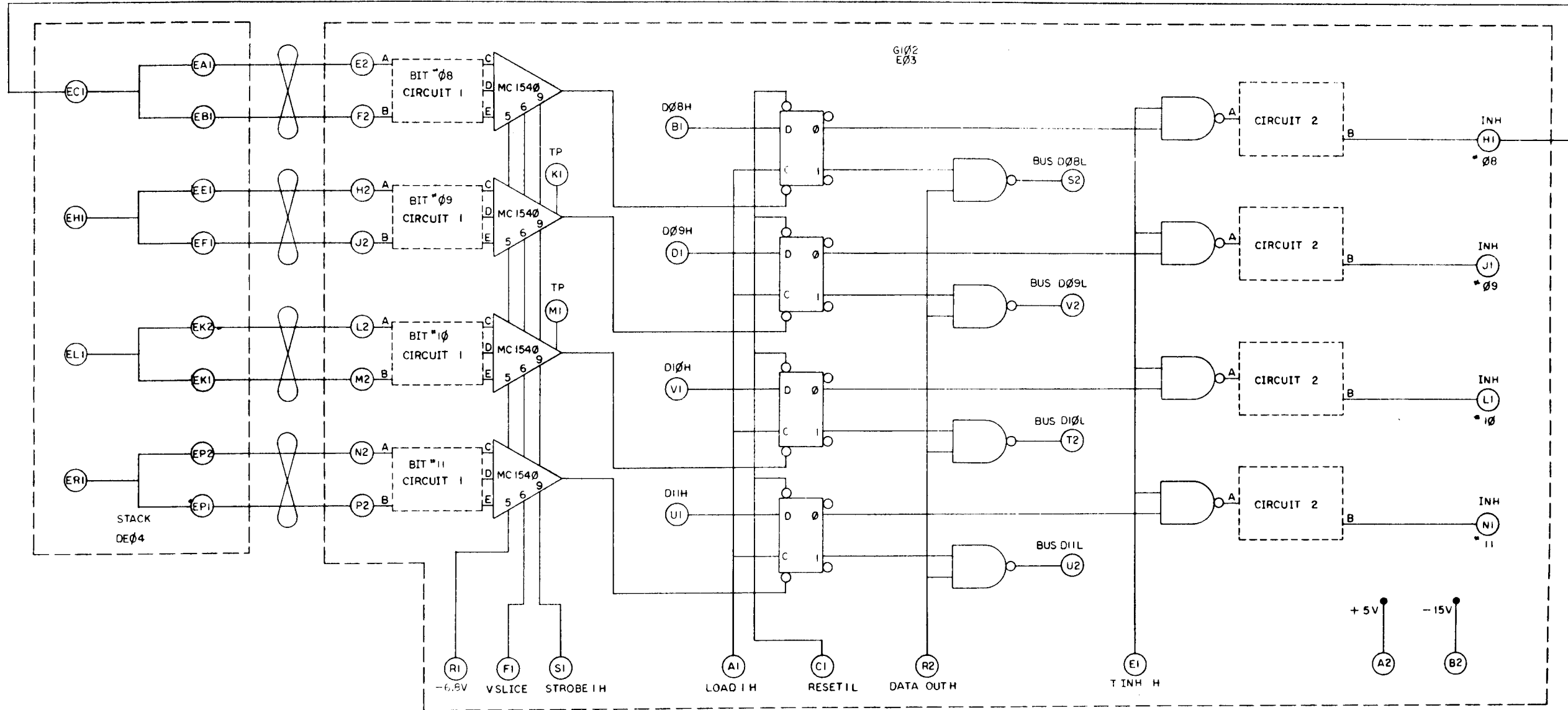
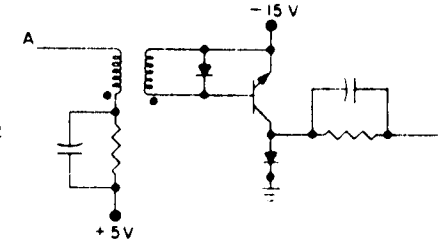
MM11-F-04

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CIRCUIT 1



CIRCUIT 2



FIRST USED ON OPTION/MOD.	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED		DATE	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
UNLESS OTHERWISE SPECIFIED		DATE	TITLE CORE MEMORY SENSE & INHIBIT	
DIMENSION IN INCHES		DATE		
TOLERANCES		DATE		
DECIMALS FRACTIONS ANGLES		DATE		
± .005 ± .001 ± .010		DATE	SIZE CODE NUMBER REV	
FINAL SURFACE QUALITY		DATE	DBS MM11-F-04	
REMOVE BURRS AND BREAK SHARP CORNERS		DATE	DIST.	
MATERIAL		DATE		
FINISH		DATE		
NEXT HIGHER ASSY		A-ML-MM11-F		
SCALE		SHEET 3 OF 4		

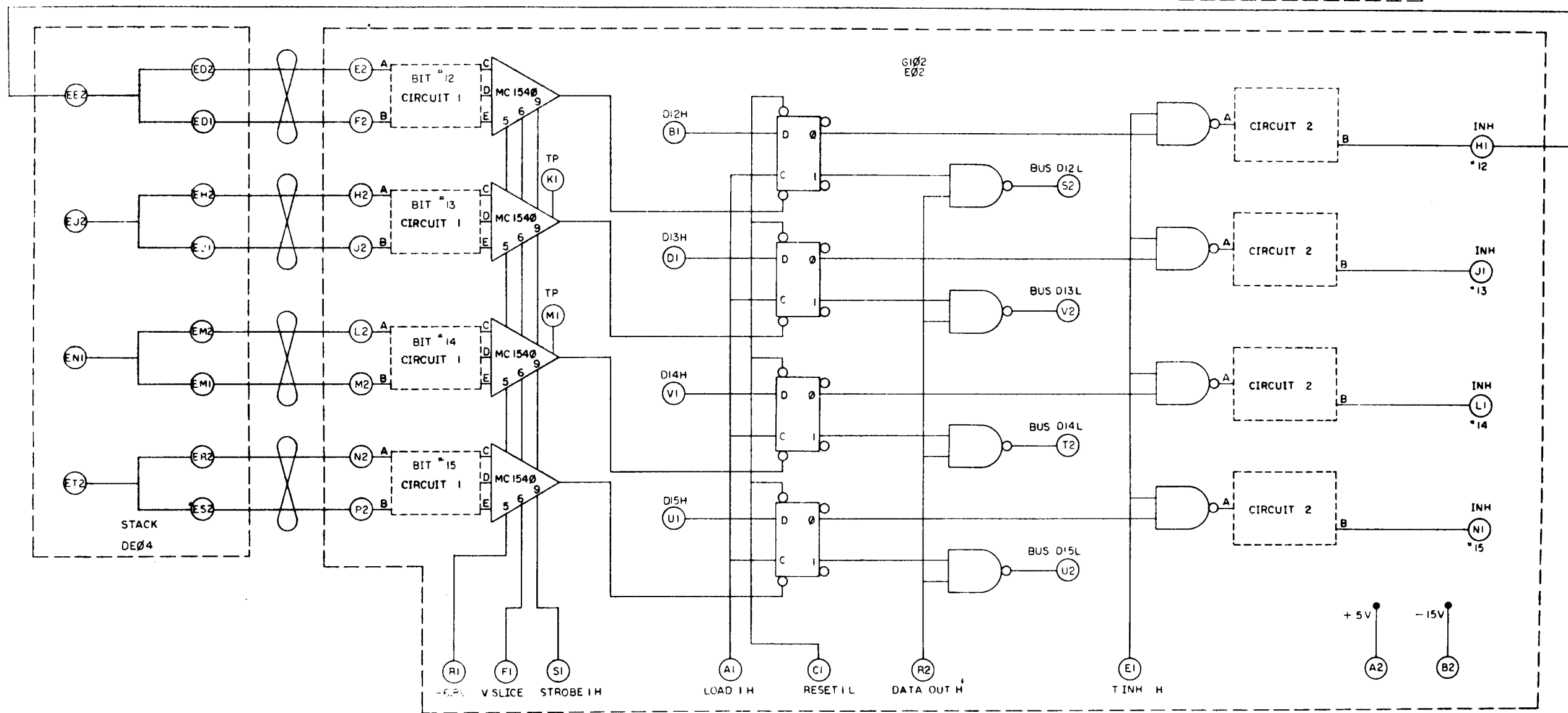
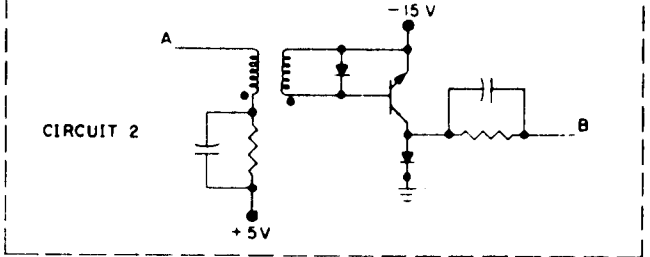
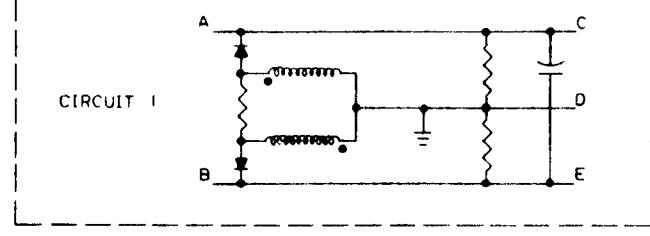
REVISIONS  
NO. CHANGE NO. REV.

DEC FORM NO. 080 102A

MM11-F-04 B



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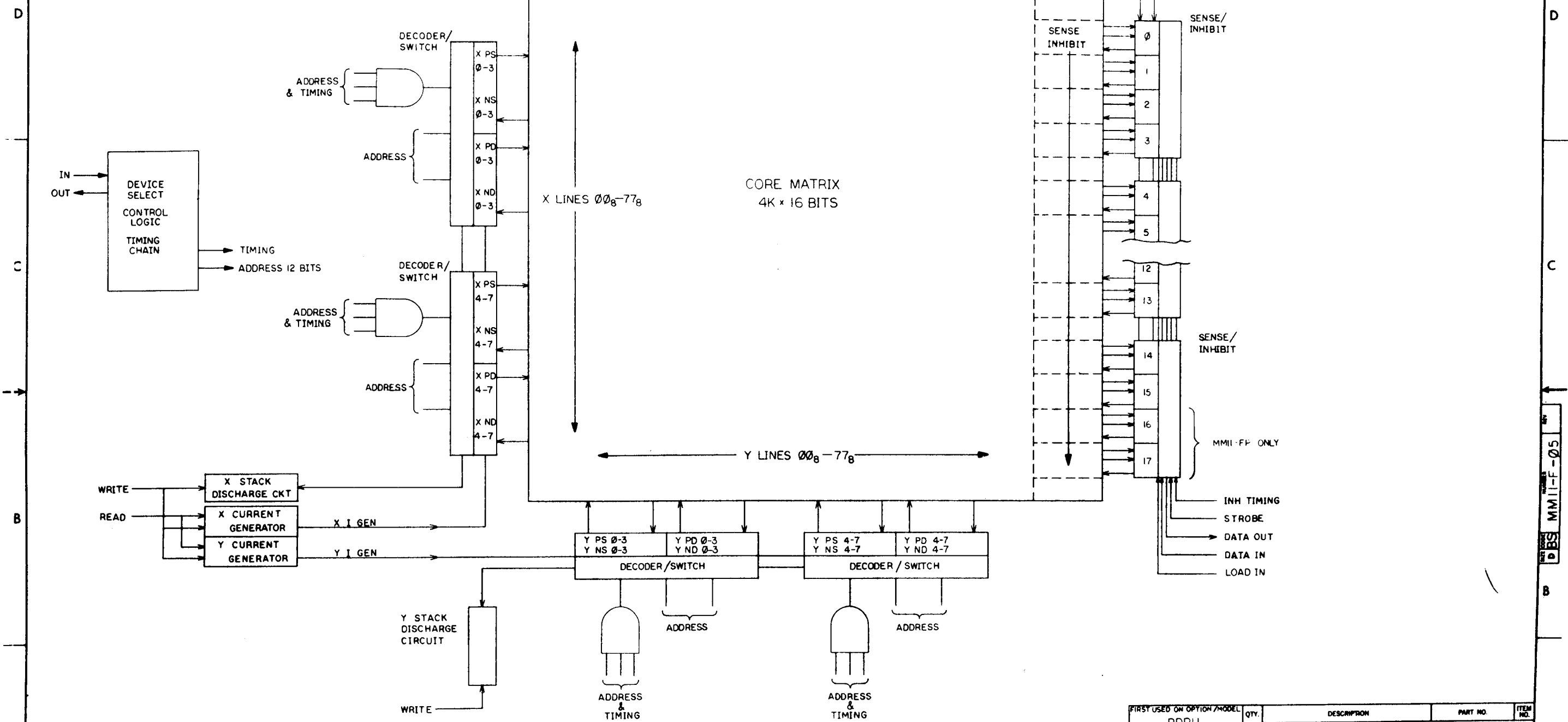


REV.	NO.

FIRST USED ON OPTION/MOD. PDPII	QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED: DIMENSION IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES ± 0.01 ± 0.005 ± 0.030 FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS	DATE 1/14/71 DATE 1-2-71 DATE 2-22-71 DATE 2-22-71 DATE 4/3/71	digital EQUIPMENT CORPORATION MAYFIELD MASSACHUSETTS		
MATERIAL + + +	NEXT HIGHER ASSY A-ML-MM11-F	TITLE CORE MEMORY SENSE & INHIBIT	SIZE CODE DBS	NUMBER MM11-F-04
FINISH + + +	SCALE SHEET 4 OF 4	DIST.		REV.

DBS MM11-F-04

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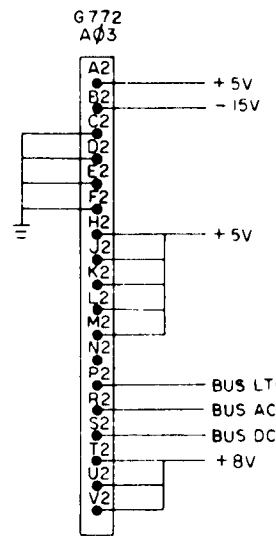
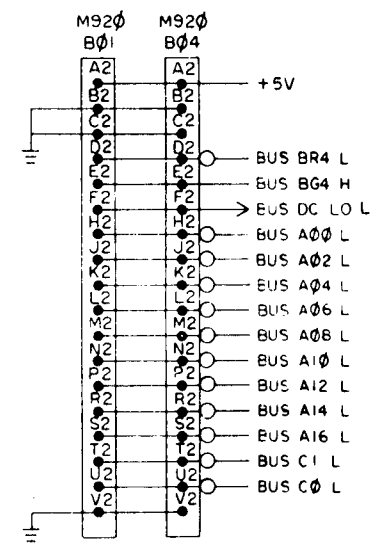
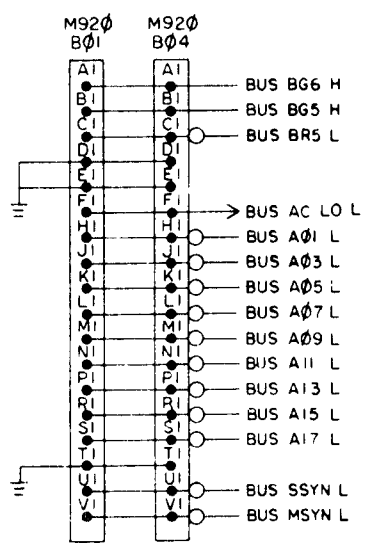
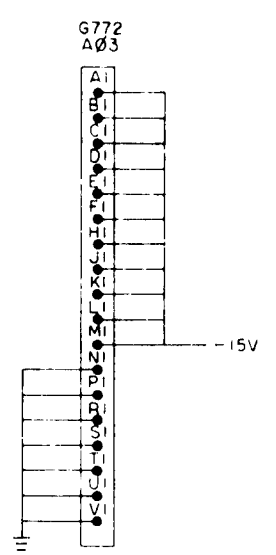
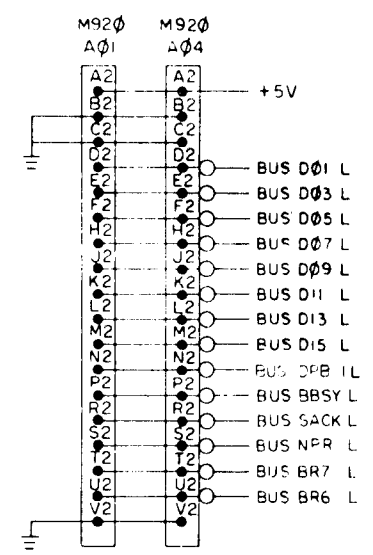
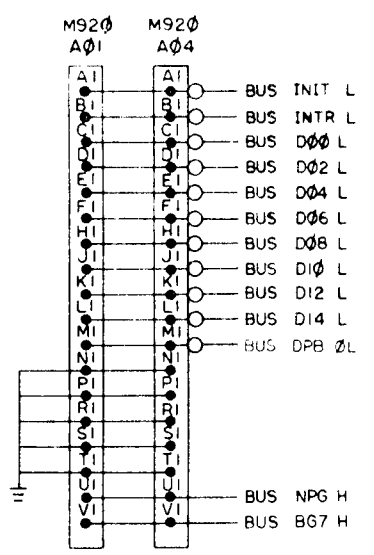


FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED		DATE	digital EQUIPMENT CORPORATION MAYFORD, MASSACHUSETTS	
DIMENSIONS IN INCHES		DATE	TITLE	
TOLERANCES		DATE	MAGNETICS	
DECIMALS	FRACTIONS	DATE	LOGIC DIAGRAM	
± .008	± 1/64	DATE	NUMBER	
FINAL SURFACE QUALITY		DATE	REV.	
REMOVE BURRS AND BREAK SHARP CORNERS		DATE	DISTRIBUTION	
MATERIAL	NEXT HIGHER ASSY	A-ML-MMII-F		
FINISH	SCALE	DISTRIBUTION		
	SHEET	DISTRIBUTION		

REV. NO.	REV.
CHANGE NO.	
CHK	

MMII-F-05

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REV	
CHG	
NO	

FIRST USED ON OPTION/MODE	QTY	DESCRIPTION	PART NO	ITEM NO
PDP11				
UNLESS OTHERWISE SPECIFIED				
DRN	DATE	PARTS LIST		
CHK'D	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS		
ENG	DATE	TITLE		
PROJ ENG	DATE	I/O CONNECTORS		
PROD	DATE	NEXT HIGHER ASSY		
MATERIAL		A-ML-MM11-F		
FINISH		SCALE NONE		
SHEET		DIB NUMBER MM11-F-06		
OF		REV.		

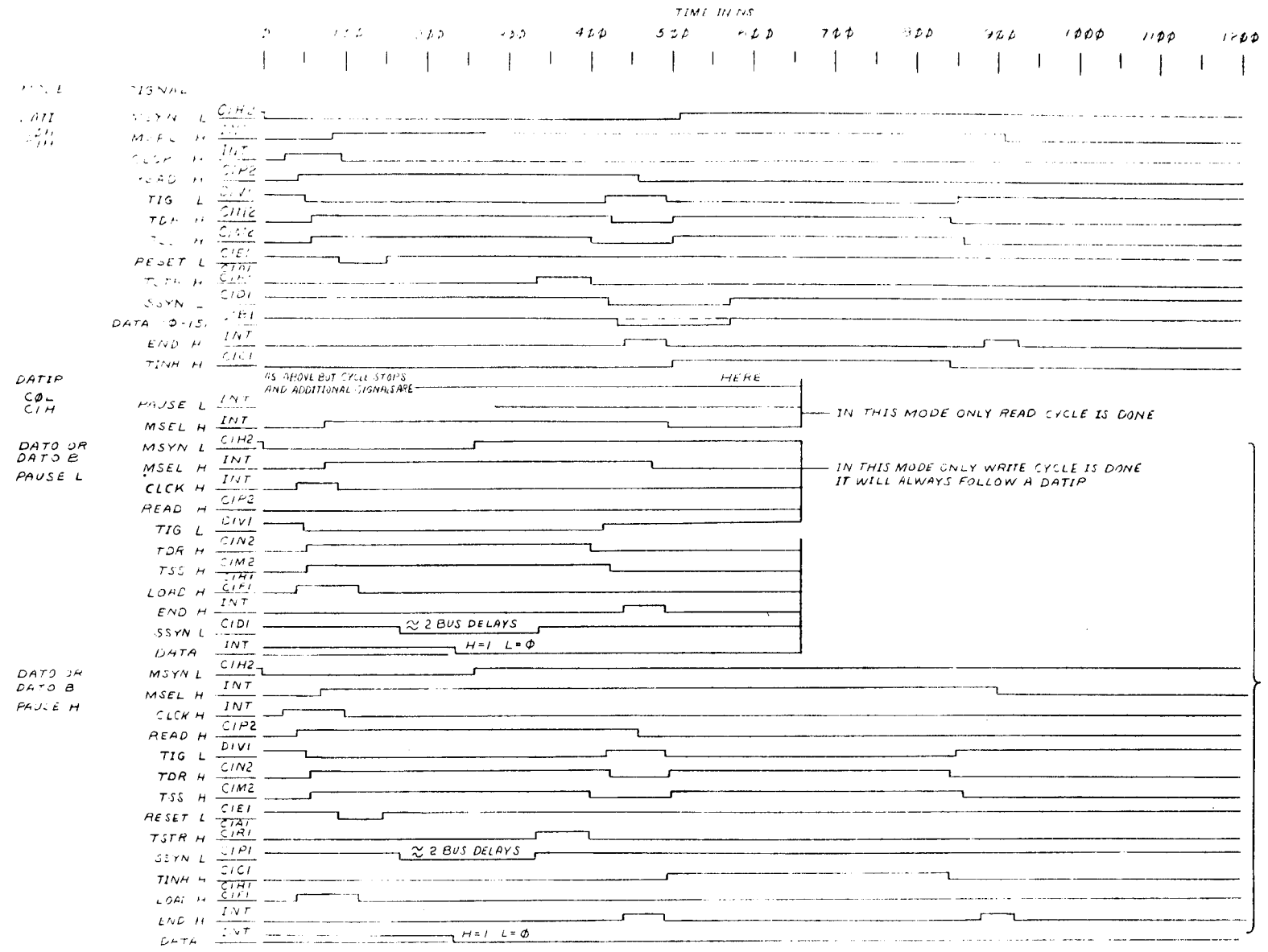
DIC MM11-F-06

DRWG NO	REV LTR
K-WL-MMII-F-Ø7	

REVISIONS			
REV LTR	ECO NO	DATE	ENG

DRAWN <i>RE Hellen</i>	DATE 1/15/71	<b>digital</b> EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE WIRE LIST (MMII-F)		
CHECKED <i>J. J. Leming</i>	DATE 1-20-71		FOR TAPE* FILE*		
ENG <i>P. Durant</i>	DATE 3-5-71		SIZE K	CODE WL	DRWG NO MMII-F-Ø7
PROJ ENG <i>P. Durant</i>	DATE 3-5-71		ASSY NO A-ML-MMII-F	REV LTR	
PROD <i>D. Call</i>	DATE 3/5/71		SCALE 1/1	SHEET 1	OF 1
		DIST.			

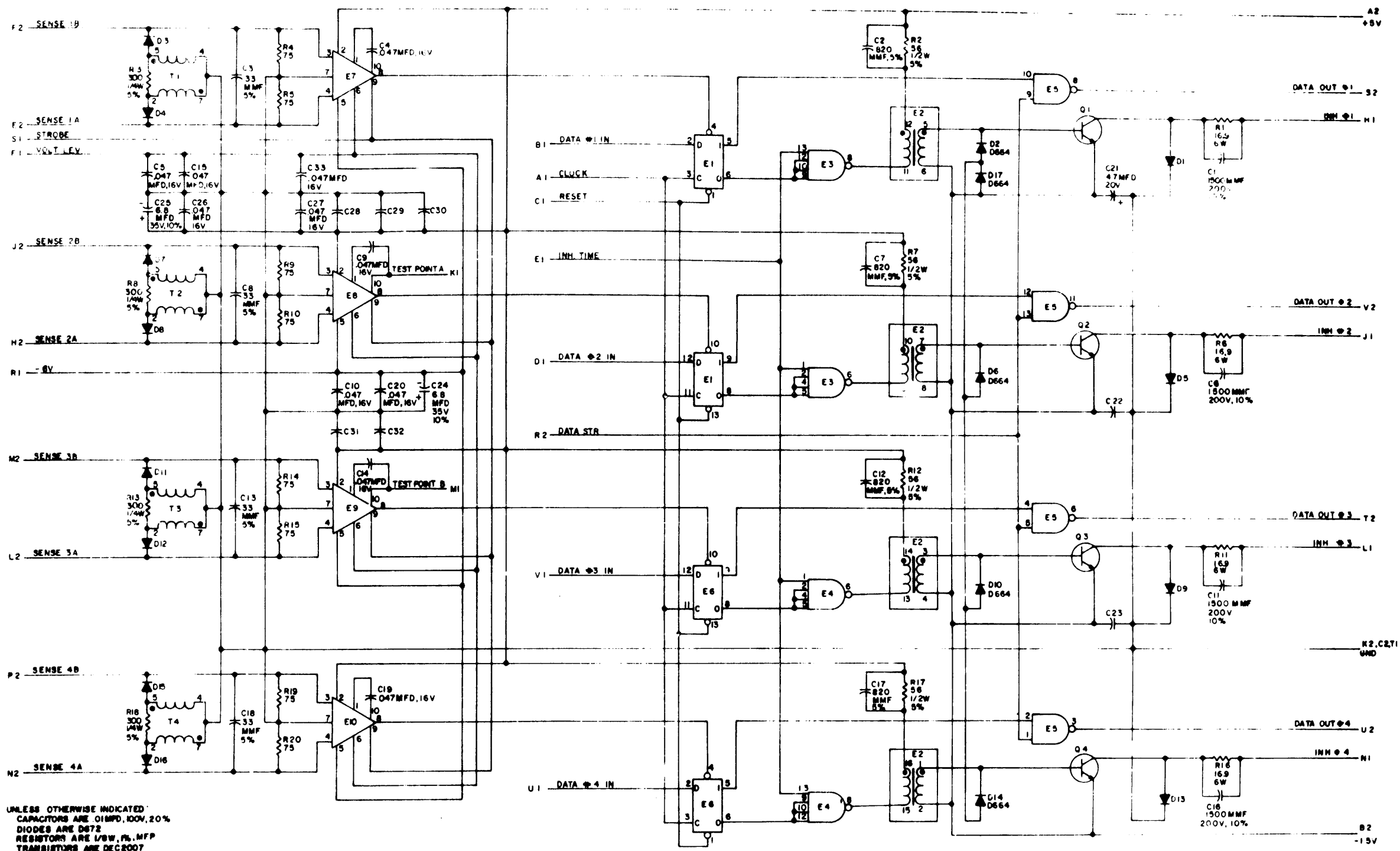
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FOR DATO B MODES  
 1. SELECTED BYTE HAS NO RESET L OR STROBE H  
 2. NON-SELECTED BYTE HAS NO LOAD H

REVISIONS	NO	REV
CHK	CHANGE	

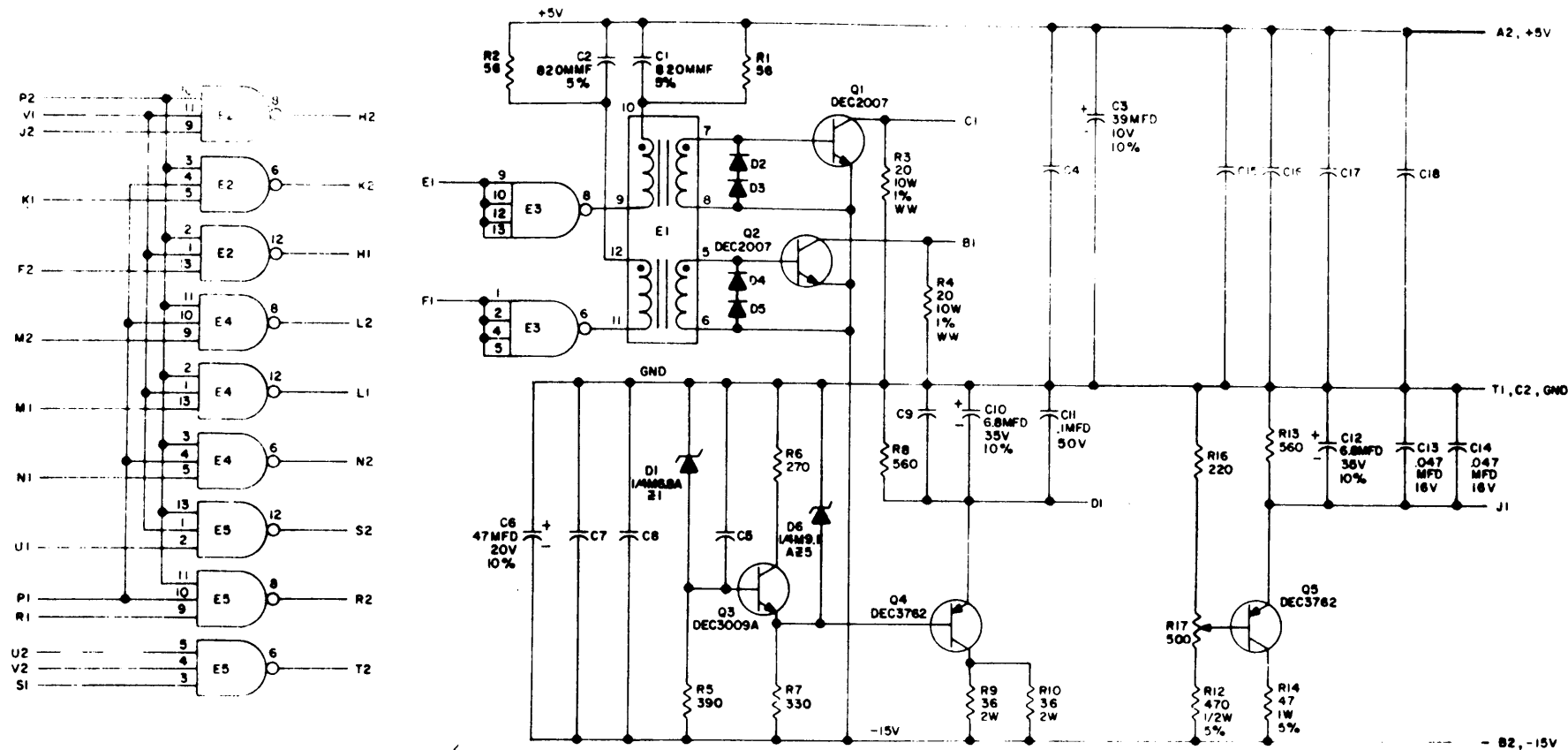
FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED	DRN	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
UNLESS OTHERWISE SPECIFIED	CHK'D	DATE	TITLE	
DIMENSION IN INCHES	ENG	DATE	TIMING & FLOW	
TOLERANCES	PROJ. ENG.	DATE	SIZE CODE NUMBER REV.	
DECIMALS FRACTIONS ANGLES	PROD.	DATE	DTDMM11-F-08	
± .005 ± .1/64 ± .030	NEXT HIGHER ASSY		SCALE NONE	
FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS	A-ML-MM11-F		SHEET OF 1	
MATERIAL			DIST.	
FINISH				



UNLESS OTHERWISE INDICATED:  
 CAPACITORS ARE 01MFD, 100V, 20%  
 DIODES ARE D672  
 RESISTORS ARE 1/8W, 5% MFP  
 TRANSISTORS ARE DEC2007  
 TRANSFORMERS ARE 1725  
 PIN 7 ON E1, E3 - GND  
 PIN 14 ON E1, E3 - DS +5V  
 E1, E8 - ARE DEC7474  
 E2 IS A DUAL IN LINE PACK XMFR-16-09996-0  
 E3, E4 ARE DEC7440  
 E5 IS DEC7404  
 E7 - E10 ARE MC1840  
 CAPACITORS C2 - C7 - C12 AND C17  
 ARE AND MUST BE SINGLE DIP

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		SENSE INHIBIT-CARD G102 EQUIPMENT CORPORATION 8102-0-1 8
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UNLESS OTHERWISE INDICATED:  
 RESISTORS ARE 1/4W, 5%  
 CAPACITORS ARE .01MFD, 100V, 20%  
 PIN 7 ON EACH IC = GND  
 PIN 14 ON EACH IC = +5V  
 E2, E4, E5 ARE DEC74110  
 E3 IS DEC7440  
 E1 IS TRANSFORMER DEC PART # 1509998-0  
 DIODES ARE D664

10000	1000	100	10	1
100000	10000	1000	100	10
1000000	100000	10000	1000	100
10000000	1000000	100000	10000	1000
100000000	10000000	1000000	100000	10000

DRN	DATE	BY
BUTLER	8/2/66	
CHKD	DATE	BY
ENGR	DATE	BY
DATE	DATE	BY

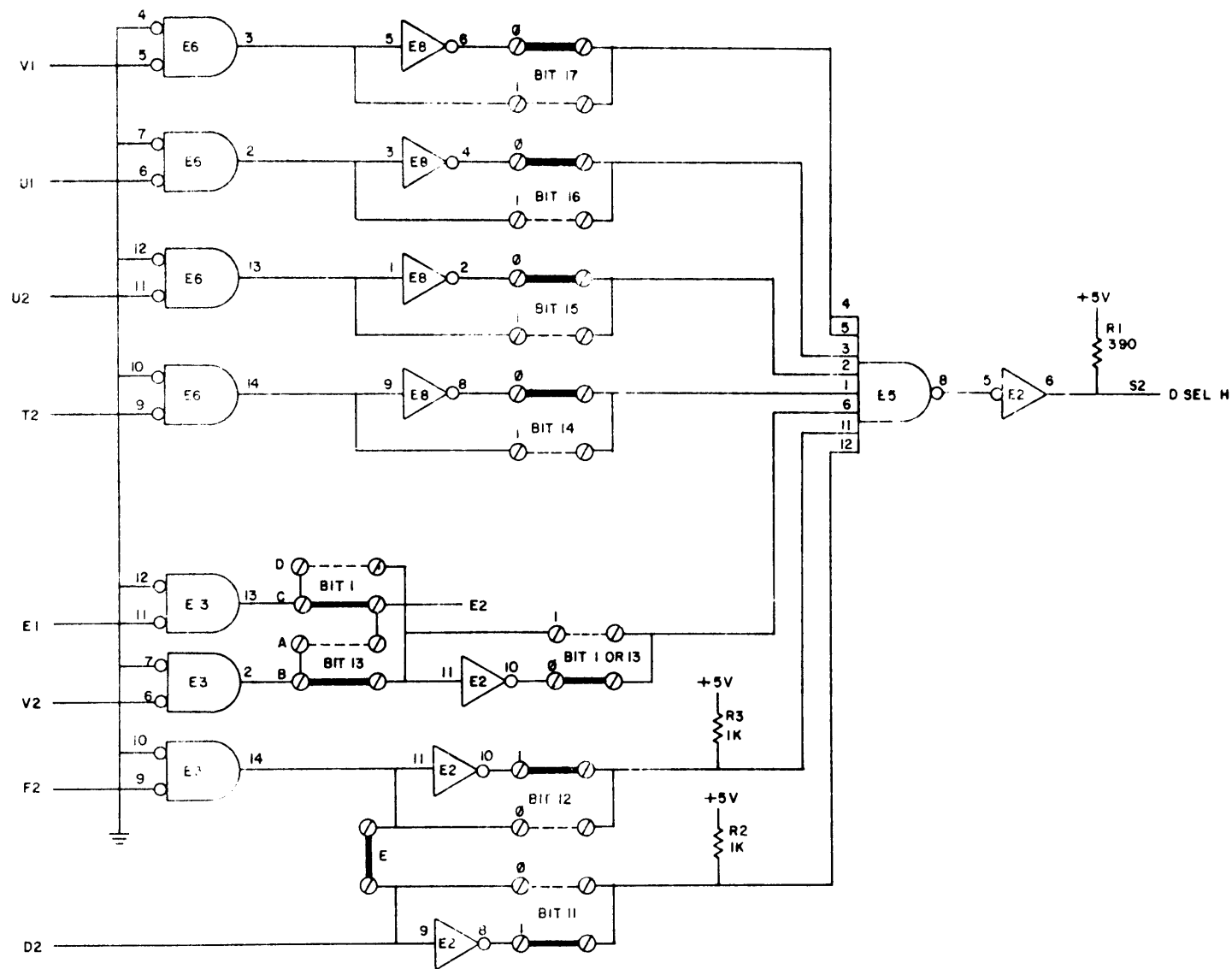
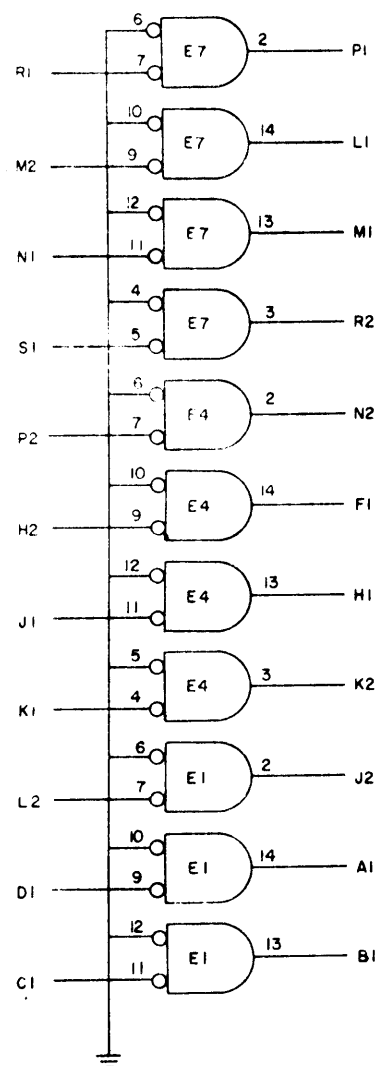
TRANSISTOR & DIODE CONVERSION CHART			
DEC	EIA	DEC	EIA
D664	1N506	1/4IN9 IAB 5	NONE
1/4IN9 IAB 1	NONE		
DEC3007	NONE		
DEC3782	NONE		
DEC3009A	2N3009A		

**EQUIPMENT CORPORATION**  
 MAYNARD MASSACHUSETTS

TITLE		MEMORY LEVELS & GATES GIO3	
SIZE	CODE	NUMBER	REV
C	CS	GIO3-0-1	E
PRINTED CIRCUIT REV		A	

Dist. 7-4-43-435 P/AM

PART NUMBER C CS G103-0-1

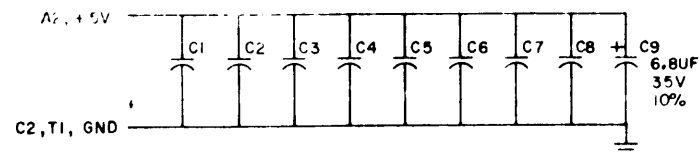


UNLESS OTHERWISE INDICATED:

RESISTORS ARE 1/4W, 5%  
 CAPACITORS ARE .01UF, 100V, 20%  
 DEC 380 = E1, E3, E4, E6, E7  
 DEC 74H04 = E2, E8  
 DEC 74H30 = E5

PIN 7 = GND ON ALL IC'S  
 PIN 14 = +5V  
 PIN 1 = GND ON DEC 360  
 PIN 8 = +5V

⊗ = SPLIT LUGS  
 ○—○ = JUMPERS, INSERTED  
 ○---○ = CUSTOMER OPTION JUMPERS, DO NOT INSERT



REV	CHG	NO	REV

DEC FORM NO. DRC 102

DRN	DATE
<i>George Wyatt</i>	1-12-71
CHKD	DATE
<i>R. Welch</i>	1-12-71
ENG	DATE
<i>6-1-71</i>	1-12-71
PROD	DATE

TRANSISTOR & DIODE CONVERSION CHART			
DEC	EIA	DEC	EIA

**digital**  
 EQUIPMENT CORPORATION  
 MAYNARD, MASSACHUSETTS

TITLE			
MEMORY DEVICE SELECT M091			
SIZE	CODE	NUMBER	REV.
C	CS	MIO91-0-1	
PRINTED CIRCUIT REV			A

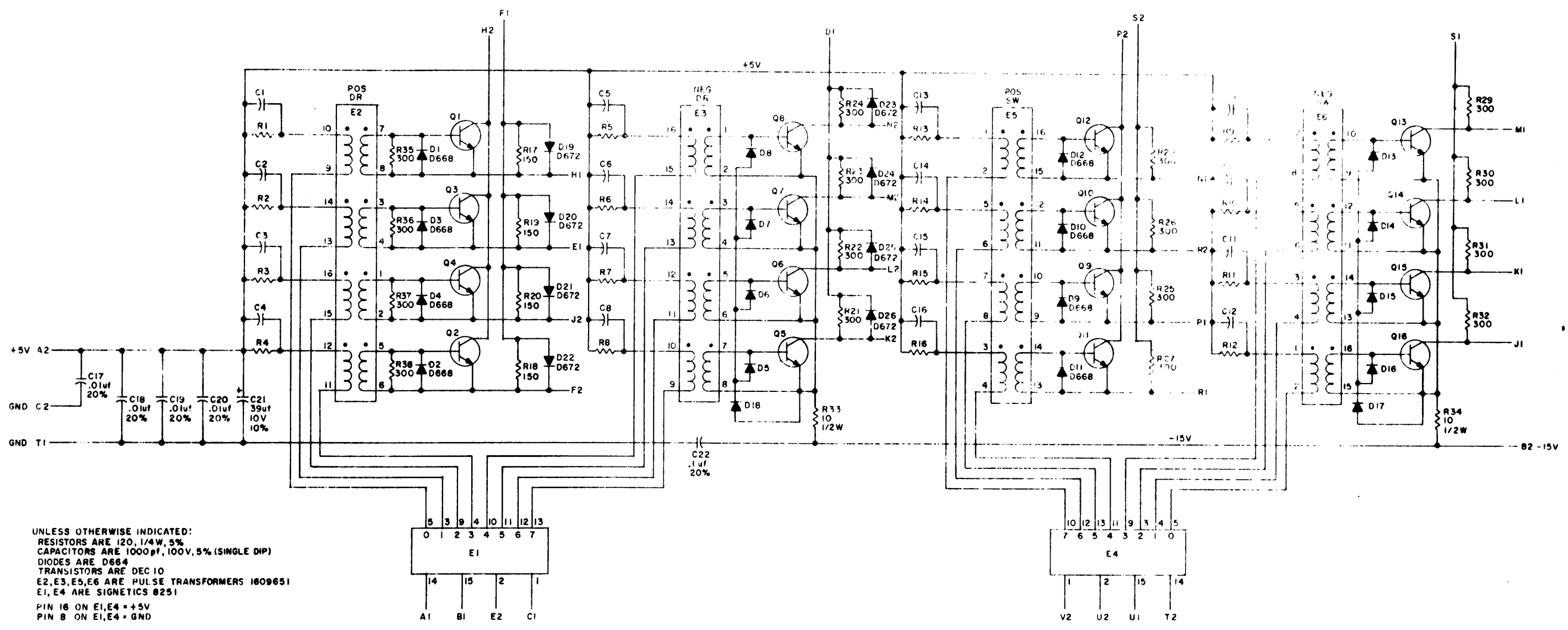
*Perk Blue*

REV. NO. MIO91-0-1



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1-0-222450-7



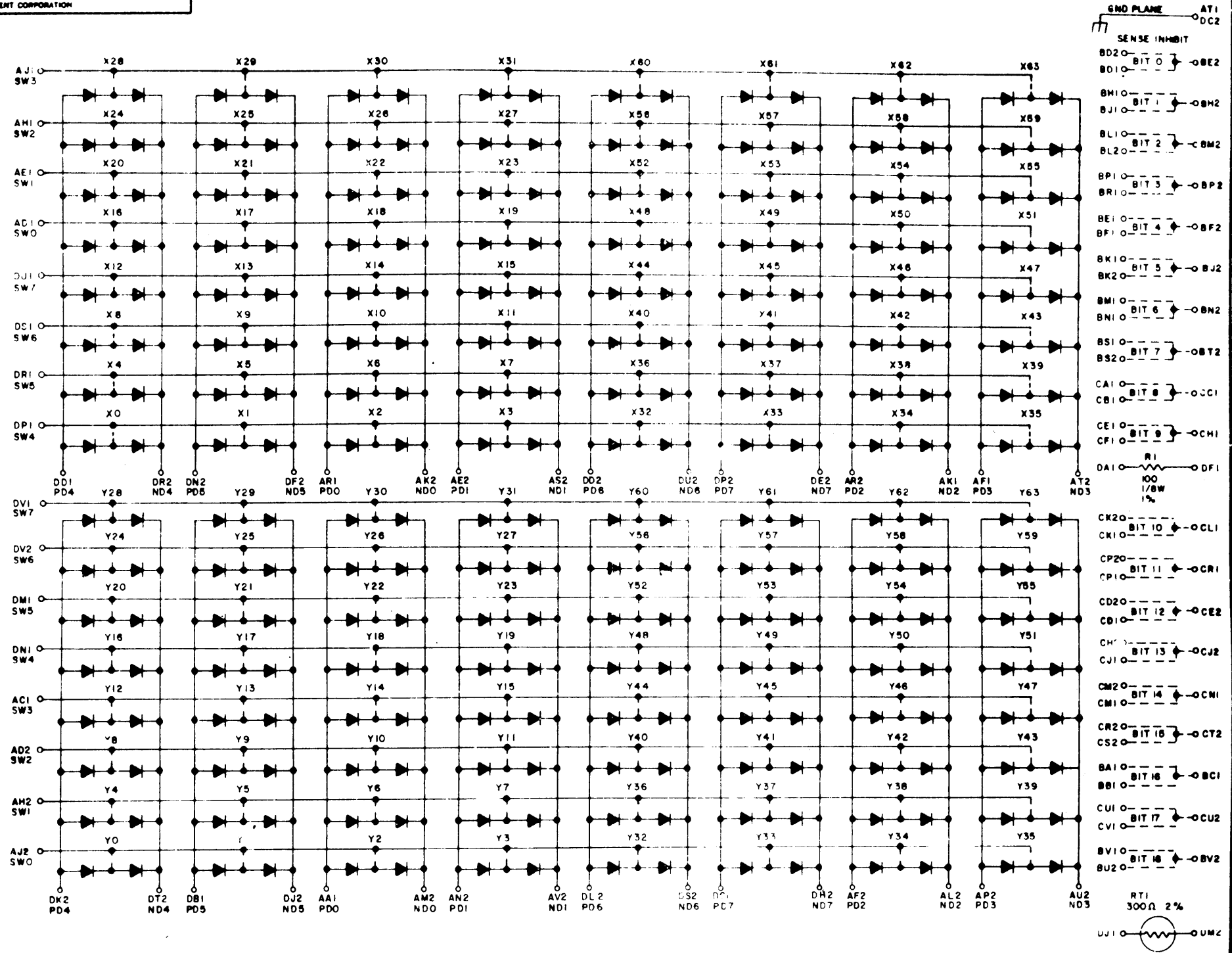
UNLESS OTHERWISE INDICATED:  
 RESISTORS ARE 120, 1/4W, 5%  
 CAPACITORS ARE 1000pf, 100V, 5% (SINGLE DIP)  
 DIODES ARE D664  
 TRANSISTORS ARE DEC 10  
 E2, E3, E5, E6 ARE PULSE TRANSFORMERS 1809651  
 E1, E4 ARE SIGNETICS 8251  
 PIN 16 ON E1, E4 +5V  
 PIN 8 ON E1, E4 GND

REV	DATE	BY	CHKD
1	00001	A	
2	00002	B	
3	00003	C	

DESIGNER	DATE	TRANSISTOR & DIODE CONVERSION CHART
BUTLER	8 16 69	DIC EIA DEC EIA
CHKD	9 5 69	D664 IN3808
ENG	DATE	NONE
PROD	DATE	

TITLE		NUMBER		REV
digital X-Y DECODER SWITCH G226		G226-0-1		6
EQUIPMENT CORPORATION		PRINTED CIRCUIT REV		

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UNLESS OTHERWISE INDICATED  
DIODES ARE D672

REV	NO	DATE	BY	CHKD
1	1			
2	1			
3	1			

TRANSISTOR & DIODE CONVERSION CHART			
TRANSISTOR	DIODE	TRANSISTOR	DIODE
2N3055	1N4148	2N3055	1N4148
2N3055	1N4148	2N3055	1N4148
2N3055	1N4148	2N3055	1N4148

**digital**  
EQUIPMENT CORPORATION  
MAYNARD, MASSACHUSETTS

TITLE: PLANAR STACK BOARD I G616  
SIZE: C CS  
NUMBER: G616-0-1  
REV: C  
PRINTED CIRCUIT REV: C

G616-0-1

MM11F,PS  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY -  
NAME PIN ORDER

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REMARKS LENGTH EXCEPTIONS

Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
										1
										1
										1
								13-4/8		1
										2
										2
								13-4/8		2
										2
										3
										3
								9-4/8		3
										4
										4
								8-4/8		4
										5
										5
										5
								13-2/8		5
										6
										6
										6
								13-6/8		6
										7
										7
								8-4/8		7
										8
										8
								7-0/8		8
										9
										9
										9
								13-0/8		9
										10
										10
										10
								13-0/8		10

MM11F.P3  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY -  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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REMARKS

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LENGTH EXCEPTIONS

RUN  
NUMBER

B A09	H	U01M1	1-01				R1							11
B A09	H	F01M1	1-02											11
B A09			1									7-4/8		11
B A09	L	U01N1	1-01				R1							12
B A09	L	F01F2	1-02											12
B A09			1									7-0/8		12
B A10	H	C02U1	1-01											13
B A10	H	U01H2	1-02				R1							13
B A10	H	F02U1	1-03											13
B A10			1									13-0/8		13
B A11	H	C02T2	1-01											14
B A11	H	U01J2	1-02				R1							14
B A11	H	F02T2	1-03											14
B A11			1									13-0/8		14
B A12	H	U01K2	1-01				R1							15
B A12	H	F01R1	1-02											15
B A12			1									8-2/8		15
B A12	L	U01R1	1-01				R1							16
B A12	L	F01K1	1-02											16
B A12			1									7-0/8		16
B A01=13	H	B02E2	1-01				I							17
B A01=13	H	U01E1	1-02				I							17
B A01=13			1									8-0/8		17
BUS A00	L	B04H2	1-01											18
BUS A00	L	B01H2	1-02											18
BUS A00	L	C01R2	1-03				R1							18
BUS A00			1									9-4/8		18
BUS A01	L	B01H1	1-01											19
BUS A01	L	B02E1	1-02				R1							19
BUS A01	L	B04H1	1-03											19
BUS A01			1									6-4/8		19
BUS A02	L	B04J2	1-01											20
BUS A02	L	B01J2	1-02											20
BUS A02	L	U01U2	1-03				R1							20
BUS A02			1									10-6/8		20

MM11F, P3  
RUN NAME

HNDWRP, V04 6/4//0  
A/P PIN ORDER BAY =  
NAME PIN ORDER

Q DRAW RV PG Y X Z 23-FEB-71

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LENGTH EXCEPTIONS

RUN  
NUMBER

MM11F, P3 RUN NAME	A/P	PIN NAME	ORDER PIN	BAY = ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	20:10 LENGTH	PAGE 4 EXCEPTIONS	RUN NUMBER
BUS A12	L	B04P2		1-01							2				30
BUS A12	L	B01P2		1-02							1				30
BUS A12	L	U01M2		1-03					R1						30
BUS A12				1									11-0/8		30
BUS A13	L	B04P1		1-01							2				31
BUS A13	L	B02V2		1-02							1				31
BUS A13	L	B01P1		1-03											31
BUS A13				1									6-6/8		31
BUS A14	L	B01M2		1-01							2				32
BUS A14	L	B02T2		1-02							1				32
BUS A14	L	B04R2		1-03											32
BUS A14				1									6-4/8		32
BUS A15	L	B01R1		1-01							2				33
BUS A15	L	B02U2		1-02							1				33
BUS A15	L	B04R1		1-03											33
BUS A15				1									6-6/8		33
BUS A16	L	B01S2		1-01							1				34
BUS A16	L	B02U1		1-02							2				34
BUS A16	L	B04S2		1-03											34
BUS A16				1									6-4/8		34
BUS A17	L	B01S1		1-01							2				35
BUS A17	L	B02V1		1-02							1				35
BUS A17	L	B04S1		1-03											35
BUS A17				1									6-6/8		35
BUS AC LJ	L	A05R2		1-01							1				36
BUS AC LJ	L	B01F1		1-02							2				36
BUS AC LJ	L	B04F1		1-03											36
BUS AC LJ				1									8-4/8		36
BUS BG 04	H	B01E2		1-01							1				37
BUS BG 04	H	B04E2		1-02											37
BUS BG 04				1									3-6/8		37
BUS BG 05	H	B01B1		1-01							1				38
BUS BG 05	H	B04B1		1-02											38
BUS BG 05				1									3-6/8		38
BUS BG 06	H	B01A1		1-01							1				39
BUS BG 06	H	B04A1		1-02											39
BUS BG 06				1									3-6/8		39

MM11F,P3  
RUN NAME

HNDWRP,V04 6/4//0  
A/P PIN ORDER BAY #  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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REMARKS

20:16  
LENGTH EXCEPTIONS

PAGE 3

RUN  
NUMBER

BUS A03	L	B04J1		1-01											2			21
BUS A03	L	B01J1		1-02											1			21
BUS A03	L	U01E2		1-03				R1										21
BUS A03				1									11-0/8					21
BUS A04	L	B04K2		1-01														22
BUS A04	L	B01K2		1-02														22
BUS A04	L	U01J1		1-03				R1										22
BUS A04				1									11-2/8					22
BUS A05	L	B04K1		1-01														23
BUS A05	L	B01K1		1-02														23
BUS A05	L	U01U2		1-03				R1										23
BUS A05				1									12-4/8					23
BUS A06	L	B04L2		1-01														24
BUS A06	L	B01L2		1-02														24
BUS A06	L	U01S1		1-03				R1										24
BUS A06				1									12-2/8					24
BUS A07	L	B04L1		1-01														25
BUS A07	L	B01L1		1-02														25
BUS A07	L	U01U1		1-03				R1										25
BUS A07				1									12-2/8					25
BUS A08	L	B04M2		1-01														26
BUS A08	L	B01M2		1-02														26
BUS A08	L	U01V2		1-03				R1										26
BUS A08				1									12-2/8					26
BUS A09	L	B04M1		1-01														27
BUS A09	L	B01M1		1-02														27
BUS A09	L	U01N2		1-03				R1										27
BUS A09				1									11-6/8					27
BUS A10	L	B04N2		1-01														28
BUS A10	L	B01N2		1-02														28
BUS A10	L	U01S2		1-03				R1										28
BUS A10				1									11-6/8					28
BUS A11	L	B04N1		1-01														29
BUS A11	L	B01N1		1-02														29
BUS A11	L	U01R2		1-03				R1										29
BUS A11				1									11-6/8					29

MM11F, P3  
RUN NAME

HNDWRP, V04 6/4/70  
A/P PIN ORDER BAY =  
NAME PIN ORDER

Q DRAW RV PG Y X Z

23-FEB-71  
REMARKS

20:10  
LENGTH EXCEPTIONS

PAGE 5

RUN  
NUMBER

MM11F, P3 RUN NAME	HNDWRP, V04 6/4/70 A/P PIN ORDER BAY = NAME PIN ORDER	Q	DRAW	RV	PG	Y	X	Z	23-FEB-71 REMARKS	20:10 LENGTH	EXCEPTIONS	PAGE 5	RUN NUMBER
BUS BG 07	H A01V1							1					40
BUS BG 07	H A04V1												40
BUS BG 07										3=6/8			40
BUS BK 09	L B01U2							1					41
BUS BK 09	L B04U2												41
BUS BK 09										3=6/8			41
BUS BK 02	L B01C1							1					42
BUS BK 02	L B04C1												42
BUS BK 02										3=6/8			42
BUS BK 06	L A01U2							1					43
BUS BK 06	L A04U2												43
BUS BK 06										3=6/8			43
BUS BR 07	L A01T2							1					44
BUS BR 07	L A04T2												44
BUS BR 07										3=6/8			44
BUS BSY	L A01P2						I	1					45
BUS BSY	L A04P2						I						45
BUS BSY										3=6/8			45
BUS C0	L B01U2							2					46
BUS C0	L B04U2							1					46
BUS C0	L C01N1						R1						46
BUS C0										8=6/8			46
BUS C1	L B01T2							2					47
BUS C1	L B04T2							1					47
BUS C1	L C01P1						R1						47
BUS C1										9=0/8			47
BUS D SEL	H B02S2							1					48
BUS D SEL	H C01K2						R1						48
BUS D SEL										4=2/8			48
BUS DP80	L A04M1						I	2					49
BUS DP80	L A01M1						I	1					49
BUS DP80	L C01V2						I	2					49
BUS DP80	L C01T2						R1						49
BUS DP80										19=6/8			49

MM11F,P3  
RUN NAME

		HNDWRP, V04 6/4/70				23-FEB-71		20:16		PAGE 6				
A/P	PIN	ORDER	BAY #	Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
	NAME	PIN	ORDER											
BUS DPB1	L	A04N2	1-01							2				50
BUS DPB1	L	A01N2	1-02							1				50
BUS DPB1	L	U01S2	1-03							2				50
BUS DPB1	L	U01V2	1-04											50
BUS DPB1			1									19-6/8		50
BUS D00	L	A04C1	1-01							1				51
BUS D00	L	A01C1	1-02							2				51
BUS D00	L	B02R1	1-03							1				51
BUS D00	L	U03S2	1-04											51
BUS D00			1									18-4/8		51
BUS D01	L	A04U2	1-01							1				52
BUS D01	L	A01U2	1-02							2				52
BUS D01	L	B02M2	1-03							1				52
BUS D01	L	U03V2	1-04											52
BUS D01			1									18-6/8		52
BUS D02	L	A04U1	1-01							1				53
BUS D02	L	A01U1	1-02							2				53
BUS D02	L	B02N1	1-03							1				53
BUS D02	L	U03T2	1-04											53
BUS D02			1									18-4/8		53
BUS D03	L	A04E2	1-01							1				54
BUS D03	L	A01E2	1-02							2				54
BUS D03	L	B02S1	1-03							1				54
BUS D03	L	U03U2	1-04											54
BUS D03			1									18-4/8		54
BUS D04	L	A01E1	1-01							1				55
BUS D04	L	A04E1	1-02							2				55
BUS D04	L	B02M2	1-03							1				55
BUS D04	L	U02S2	1-04											55
BUS D04			1									18-0/8		55
BUS D05	L	A04F2	1-01							1				56
BUS D05	L	A01F2	1-02							2				56
BUS D05	L	B02H2	1-03							1				56
BUS D05	L	U02V2	1-04											56
BUS D05			1									18-2/8		56
BUS D06	L	A04F1	1-01							1				57
BUS D06	L	A01F1	1-02							2				57
BUS D06	L	B02J1	1-03							1				57
BUS D06	L	U02T2	1-04											57
BUS D06			1									18-0/8		57



MM11F,PS  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY #  
NAME PIN ORDER

Q DRAW RV PG Y X Z

23-FEB-71  
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LENGTH EXCEPTIONS

RUN  
NUMBER

MM11F,PS RUN NAME	A/P	PIN NAME	ORDER PIN	BAY # ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	23-FEB-71	20:10 LENGTH	PAGE 7 EXCEPTIONS	RUN NUMBER
BUS D07	L	A04H2		1-01							1					58
BUS D07	L	A01H2		1-02							2					58
BUS D07	L	B02K1		1-03							1					58
BUS D07	L	D02J2		1-04												58
BUS D07				1										18=0/8		58
BUS D08	L	A01H1		1-01							1					59
BUS D08	L	A04H1		1-02							2					59
BUS D08	L	B02L2		1-03							1					59
BUS D08	L	E03S2		1-04												59
BUS D08				1										20=4/8		59
BUS D09	L	A04J2		1-01							1					60
BUS D09	L	A01J2		1-02							2					60
BUS D09	L	B02J1		1-03							1					60
BUS D09	L	E03V2		1-04												60
BUS D09				1										20=6/8		60
BUS D10	L	A04J1		1-01							1					61
BUS D10	L	A01J1		1-02							2					61
BUS D10	L	B02C1		1-03							1					61
BUS D10	L	E03T2		1-04												61
BUS D10				1										20=4/8		61
BUS D11	L	A04K2		1-01							2					62
BUS D11	L	A01K2		1-02							1					62
BUS D11	L	C01T2		1-03					R1		2					62
BUS D11	L	E03U2		1-04												62
BUS D11				1										20=2/8		62
BUS D12	H	A01K1		1-01							1					63
BUS D12	H	A04K1		1-02							2					63
BUS D12	H	B02F2		1-03							1					63
BUS D12	H	E02S2		1-04												63
BUS D12				1										20=0/8		63
BUS D13	L	A04L2		1-01							1					64
BUS D13	L	A01L2		1-02							2					64
BUS D13	L	C01F2		1-03					R1		1					64
BUS D13	L	E02V2		1-04												64
BUS D13				1										20=0/8		64
BUS D14	L	A04L1		1-01							2					65
BUS D14	L	A01L1		1-02							1					65
BUS D14	L	U01H1		1-03					R1		2					65
BUS D14	L	E02T2		1-04												65
BUS D14				1										20=0/8		65

MM11F,P3  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY #  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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REMARKS

20116  
LENGTH EXCEPTIONS

PAGE 8  
RUN NUMBER

RUN NAME	A/P	PIN NAME	ORDER PIN	BAY # ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
BUS D15	L	A04M2		1-01							2				66
BUS D15	L	A01M2		1-02							1				66
BUS D15	L	C01U2		1-03				R1			2				66
BUS D15	L	E02U2		1-04											66
BUS D15				1									19-6/8		66
BUS DC L0	L	A03S2		1-01				I			1				67
BUS DC L0	L	B04F2		1-02				I			2				67
BUS DC L0	L	B01F2		1-03				I			1				67
BUS DC L0	L	C01E2		1-04				I							67
BUS DC L0				1									12-6/8		67
BUS INIT	L	A04A1		1-01							2				68
BUS INIT	L	A01A1		1-02							1				68
BUS INIT	L	C01J2		1-03				R1							68
BUS INIT				1									12-4/8		68
BUS INTR	L	A01B1		1-01							1				69
BUS INTR	L	A04B1		1-02											69
BUS INTR				1									3-6/8		69
BUS MSYN	L	B04V1		1-01							1				70
BUS MSYN	L	B01V1		1-02							2				70
BUS MSYN	L	C01H2		1-03				R1							70
BUS MSYN				1									7-2/8		70
BUS NPG	H	A01U1		1-01							1				71
BUS NPG	H	A04U1		1-02											71
BUS NPG				1									3-6/8		71
BUS NPR	L	A01S2		1-01 *				I			1				72
BUS NPR	L	A04S2		1-02 *				I							72
BUS NPR				1									3-6/8		72
BUS SACK	L	A01R2		1-01							1				73
BUS SACK	L	A04R2		1-02											73
BUS SACK				1									3-6/8		73
BUS SSYN	L	B04U1		1-01							1				74
BUS SSYN	L	B01U1		1-02							2				74
BUS SSYN	L	C01O1		1-03				R1							74
BUS SSYN				1									7-0/8		74

MM11F,PS  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY #  
NAME PIN ORDER

Q DRAW RV PG Y X Z

23-FEB-71  
REMARKS

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LENGTH EXCEPTIONS

RUN  
NUMBER

MM11F,PS RUN NAME	A/P	PIN NAME	ORDER PIN	BAY # ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	23-FEB-71	20:16 LENGTH	PAGE 9 EXCEPTIONS	RUN NUMBER
DATA OUT		C01B1		1-01				R1			1					75
DATA OUT		U02R2		1-02							2					75
DATA OUT		U03R2		1-03							1					75
DATA OUT		E03R2		1-04							2					75
DATA OUT		E02R2		1-05							1					75
DATA OUT		E01R2		1-06				1								75
DATA OUT				1										20-0/8		75
U00	H	B02P1		1-01							1					76
U00	H	U03B1		1-02												76
U00				1										6-4/8		76
U01	H	B02L1		1-01							1					77
U01	H	U03U1		1-02												77
U01				1										7-0/8		77
U02	H	B02M1		1-01							1					78
U02	H	U03V1		1-02												78
U02				1										8-6/8		78
U03	H	B02R2		1-01							1					79
U03	H	U03U1		1-02												79
U03				1										8-0/8		79
U04	H	B02N2		1-01							1					80
U04	H	U02B1		1-02												80
U04				1										6-4/8		80
U05	H	B02F1		1-01							1					81
U05	H	U02U1		1-02												81
U05				1										7-2/8		81
U06	H	B02H1		1-01							1					82
U06	H	U02V1		1-02												82
U06				1										9-0/8		82
U07	H	B02K2		1-01							1					83
U07	H	U02U1		1-02												83
U07				1										8-6/8		83
U08	H	B02J2		1-01							1					84
U08	H	E03B1		1-02												84
U08				1										9-4/8		84
U09	H	B02A1		1-01							1					85
U09	H	E03U1		1-02												85
U09				1										10-6/8		85

MM11F.P3  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY #  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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LENGTH EXCEPTIONS

RUN  
NUMBER

MM11F.P3 RUN NAME	A/P	PIN NAME	ORDER PIN	BAY # ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	23-FEB-71	20:10 LENGTH	PAGE 10 EXCEPTIONS	RUN NUMBER
U10	H	B0201		1-01							1					86
U10	H	E03V1		1-02												86
U10				1										12-2/8		86
U11	H	C01M1		1-01				R1			1					87
U11	H	E03U1		1-02												87
U11				1										8-6/8		87
U12	H	B0202		1-01							1					88
U12	H	E0201		1-02												88
U12				1										10-0/8		88
U13	H	C0102		1-01				R1			1					89
U13	H	E0201		1-02												89
U13				1										7-6/8		89
U14	H	U01F1		1-01				R1			1					90
U14	H	E02V1		1-02												90
U14				1										6-4/8		90
U15	H	C0101		1-01				R1			1					91
U15	H	E0201		1-02												91
U15				1										7-6/8		91
U17	H	C01V1		1-01				I			1					92
U17	H	E01V1		1-02				I								92
U17				1										7-4/8		92
U18	H	C01S1		1-01				I			1					93
U18	H	E0101		1-02				I								93
U18				1										6-2/8		93
GND 01		A0102		1-01							1					94
GND 01		A0402		1-02												94
GND 01				1										3-6/8		94

MM11F,PS  
RUN NAME

HNDWRP, V04 6/4/70  
A/P PIN ORDER BAY =  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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REMARKS

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RUN  
NUMBER

GND 02	A01C2	1-01	I	1								95
GND 02	A01T1	1-02	I	2								95
GND 02	B01C2	1-03	I	1								95
GND 02	B01T1	1-04	I	2								95
GND 02	C01C2	1-05	I	1								95
GND 02	C01T1	1-06	I	2								95
GND 02	U01C2	1-07	I	1								95
GND 02	U01T1	1-08	I	2								95
GND 02	E01C2	1-09	I	1								95
GND 02	E01T1	1-10	I	2								95
GND 02	F01C2	1-11	I	1								95
GND 02	F01T1	1-12	I									95
GND 02	1	1								41-0/8		95
GND 03	A01N1	1-01										96
GND 03	A04N1	1-02										96
GND 03	1	1								3-6/8		96
GND 04	A01P1	1-01										97
GND 04	A04P1	1-02										97
GND 04	1	1								3-6/8		97
GND 05	A01R1	1-01										98
GND 05	A04R1	1-02										98
GND 05	1	1								3-6/8		98
GND 06	A01S1	1-01										99
GND 06	A04S1	1-02										99
GND 06	1	1								3-6/8		99
GND 06A	A04C2	1-01				R1						100
GND 06A	A04T1	1-02				R1						100
GND 06A	B04C2	1-03				R1						100
GND 06A	B04T1	1-04				R1						100
GND 06A	1	1								11-4/8		100
GND 07	C04C2	1-01	I	1								101
GND 07	C04T1	1-02	I	2								101
GND 07	U04C2	1-03	I	1								101
GND 07	U04T1	1-04	I	2								101
GND 07	E04C2	1-05	I	1								101
GND 07	E04T1	1-06	I	2								101
GND 07	F04C2	1-07	I	1								101
GND 07	F04T1	1-08	I									101
GND 07	1	1								26-2/8		101

MM11F,P3  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY •  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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REMARKS

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LENGTH EXCEPTIONS

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RUN  
NUMBER

Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
						1				102
										102
								3-6/8		102
						1				103
										103
								3-6/8		103
						1				104
										104
								3-6/8		104
						1				105
										105
								3-6/8		105
						1				106
										106
								3-6/8		106
						1				107
							R1			107
							R1			107
								4-0/8		107
						1				108
						2				108
						1	I			108
						2	I			108
						1				108
						2				108
						1				108
						2				108
						1				108
						2				108
						1				108
						2				108
						1				108
						1				108
								38-0/8		108
						1				108

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NAME

HNDWRP, V04 6/4/70  
A/ZP PIN ORDER BAY #  
NAME PIN ORDER

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Q	DRAW	RV	PC	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
						1				109
						2				109
						1				109
						2				109
						1				109
						2				109
						1				109
						2				109
						1				109
						2				109
						1				109
						2				109
						1				109
						1				109
						1		38-0/8		109
						1				110
						1				110
						1		3-2/8		110
						1				111
						1				111
						1		3-0/8		111
						1				112
						1				112
						1		3-0/8		112
						1				113
						1				113
						1		3-0/8		113
						1				114
						1				114
						1		3-6/8		114
						1				115
						1				115
						1		3-4/8		115
						1				116
						1				116
						1		3-6/8		116
						1				117
						1				117
						1		3-6/8		117

MM11F,PS  
RUN NAME

HNDWRP, VCA 5/4/70  
A/P PIN ORDER BAY  
NAME PIN ORDER

Q DRAW RV PG Y X Z

23-FEB-71  
REMARKS

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LENGTH EXCEPTIONS

RUN  
NUMBER

MM11F,PS RUN NAME	HNDWRP, VCA 5/4/70 A/P PIN ORDER BAY NAME PIN ORDER	Q DRAW RV PG Y X Z	23-FEB-71 REMARKS	20:10 PAGE 14 LENGTH EXCEPTIONS	RUN NUMBER
INH 08	E03H1				118
INH 08	E04C1				118
INH 08				3-0/8	118
INH 09	E03J1				119
INH 09	E04H1				119
INH 09				2-6/8	119
INH 10	E03L1				120
INH 10	E04L1				120
INH 10				2-6/8	120
INH 11	E03N1				121
INH 11	E04R1				121
INH 11				3-0/8	121
INH 12	E02H1				122
INH 12	E04E2				122
INH 12				3-6/8	122
INH 13	E02J1				123
INH 13	E04J2				123
INH 13				3-4/8	123
INH 14	E02L1				124
INH 14	E04N1				124
INH 14				3-4/8	124
INH 15	E02N1				125
INH 15	E04T2				125
INH 15				3-6/8	125
+3V	C03A2				126
+3V	C03J1				126
+3V	C02A2				126
+3V	C02J1				126
+3V	F02J1				126
+3V	F02A2				126
+3V	F03J1				126
+3V	F03A2				126
+3V				27-2/8	126
LOAD 00	H C01H1		R1		127
LOAD 00	H U02A1				127
LOAD 00	H U03A1				127
LOAD 00	H E01J1		R1		127
LOAD 00				14-4/8	127



REF ID	REV	DATE	BY	CHK	REV	PG	Y	X	Z	REMARKS	23-FEB-71	20:10	PAGE 15	RUN NUMBER
NAME	A/P	PIN	ORDER	BAY	Q	DRAW	RV	PG	Y	X	Z	LENGTH	EXCEPTIONS	NUMBER
		NAME	PIN	ORDER										
LOAD 01	H	C01F1		1-01				R1			1			128
LOAD 01	H	E01A1		1-02				R1			2			128
LOAD 01	H	E02A1		1-03							1			128
LOAD 01	H	E03A1		1-04										128
LOAD 01				1								12-4/8		128
LUG 1		C01L2		1-01				R1			1			129
LUG 1		F01P2		1-02										129
LUG 1				1								10-6/8		129
HEAD	H	C03C1		1-01							1			130
HEAD	H	C02C1		1-02							2			130
HEAD	H	C01P2		1-03				I			1			130
HEAD	H	C02V2		1-04							2			130
HEAD	H	C03V2		1-05							1			130
HEAD	H	F03C1		1-06							2			130
HEAD	H	F02C1		1-07							1			130
HEAD	H	F02V2		1-08							2			130
HEAD	H	F03V2		1-09										130
HEAD				1								31-2/8		130
RESET 00	L	E01U2		1-01 H				R1			1		HND ORDER?	131
RESET 00	L	C01U1		1-02 H				R1			2		HND ORDER?	131
RESET 00	L	U02C1		1-03 *				R1			1			131
RESET 00	L	U03C1		1-04 *				R1						131
RESET 00				1								16-2/8		131
RESET 01	L	C01E1		1-01 H				R1			1		HND ORDER?	132
RESET 01	L	E01G1		1-02 H				R1			2		HND ORDER?	132
RESET 01	L	E02C1		1-03 *				R1			1			132
RESET 01	L	E03C1		1-04 *				R1						132
RESET 01				1								12-6/8		132
=15V		C03B2		1-01 *				R1			2			133
=15V		C03F1		1-02 *				R1			1			133
=15V		C02F1		1-03 *				R6						133
=15V				1								5-6/8		133
=15V (1)		A03A1		1-01							1			134
=15V (1)		A03B2		1-02										134
=15V (1)				1								2-6/8		134
=15V (2)		A03C1		1-01							1			135
=15V (2)		A03E1		1-02										135
=15V (2)				1								2-4/8		135

MM11F,PS  
RUN NAME

HNDWRP, V. 4 6/4/70  
A/F PIN ORDER BAY -  
NAME PIN ORDER

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REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
			136
			136
			136
	5-6/8		136
			137
			137
			137
			137
			137
			137
	16-6/8		137
			138
			138
			138
	13-4/8		138
			139
			139
			139
			139
	14-6/8		139
			140
			140
	11-2/8		140
			141
			141
	3-6/8		141
			142
			142
			142
	12-4/8		142
			143
			143
			143
			143
			143
			143
			143
			143
	26-0/8		143
			143

MM11F,PS  
RUN NAME

HNDWRP,V04 6/4/70  
A/P PIN ORDER BAY #  
NAME PIN ORDER

Q URAW RV PG Y X Z

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REMARKS

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LENGTH EXCEPTIONS

PAGE 17  
RUN NUMBER

MM11F,PS RUN NAME	A/P	PIN NAME	ORDER PIN	BAY # ORDER	Q	URAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
TSS	H	C01M2		1-01 H										HND ORDER?	144
TSS	H	F01P1		1-02 *											144
TSS	H	F01V2		1-03 *											144
TSS				1									14-0/8		144
V SLICE		U02F1		1-01							2				145
V SLICE		U03F1		1-02							1				145
V SLICE		L03F1		1-03							2				145
V SLICE		L02F1		1-04							1				145
V SLICE		L01F1		1-05					1		2				145
V SLICE		F01J1		1-06											145
V SLICE				1									18-2/8		145
X DISC	H	C02S2		1-01							2				146
X DISC	H	C02S1		1-02							1				146
X DISC	H	F01C1		1-03							2				146
X DISC	H	F02S1		1-04							1				146
X DISC	H	F02S2		1-05											146
X DISC				1									18-0/8		146
XUR (0=3)		C02E2		1-01							1				147
XUR (0=3)		F01H1		1-02											147
XUR (0=3)				1									11-0/8		147
XUR (4=7)		F01L1		1-01							1				148
XUR (4=7)		F02E2		1-02											148
XUR (4=7)				1									3-2/8		148
XNDR=0		C02K2		1-01							1				149
XNDR=0		C04K2		1-02											149
XNDR=0				1											149
XNDR=1		C02L2		1-01							1				150
XNDR=1		C04S2		1-02											150
XNDR=1				1									3-4/8		150
XNDR=2		C02M2		1-01							1				151
XNDR=2		C04K1		1-02											151
XNDR=2				1									3-2/8		151
XNDR=3		C02N2		1-01							1				152
XNDR=3		C04T2		1-02											152
XNDR=3				1									3-4/8		152
XNDR=6		F02M2		1-01							1				153
XNDR=6		F04U2		1-02											153
XNDR=6				1									3-6/8		153

MM11F,PS  
RUN NAME

HNDWRP, V04 6/4/70  
A/P PIN ORDER BAY  
NAME PIN ORDER

Q DRAW RV FS Y X Z

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REMARKS

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LENGTH EXCEPTIONS

RUN  
NUMBER

XND=7	F02N2	1-01				1						154
XND=7	F04E2	1-02										154
XND=7		1								3-4/8		154
XND4	F02K2	1-01				1						155
XND4	F04R2	1-02										155
XND4		1								3-6/8		155
XND5	F02L2	1-01				1						156
XND5	F04F2	1-02										156
XND5		1								3-4/8		156
XPDR=0	C02J2	1-01				1						157
XPDR=0	C04R1	1-02										157
XPDR=0		1								3-4/8		157
XPDR=1	C02E1	1-01				1						158
XPDR=1	C04E2	1-02										158
XPDR=1		1								3-4/8		158
XPDR=2	C02F2	1-01				1						159
XPDR=2	C04R2	1-02										159
XPDR=2		1								3-6/8		159
XPDR=3	C02H1	1-01				1						160
XPDR=3	C04F1	1-02										160
XPDR=3		1								3-4/8		160
XPDR=6	F02F2	1-01				1						161
XPDR=6	F04U2	1-02										161
XPDR=6		1								3-4/8		161
XPDR=7	F02H1	1-01				1						162
XPDR=7	F04P2	1-02										162
XPDR=7		1								4-0/8		162
XPDR=4	F02J2	1-01				1						163
XPDR=4	F04U1	1-02										163
XPDR=4		1								3-2/8		163
XPDR=5	F02E1	1-01				1						164
XPDR=5	F04N2	1-02										164
XPDR=5		1								4-0/8		164
XS (0=3)	C02U2	1-01				1						165
XS (0=3)	F01K2	1-02										165
XS (0=3)		1								9-4/8		165

MM11F,P3  
RUN NAME

HNDWRP,V04 6/4//0  
A/P PIN ORDER BAY -  
NAME PIN ORDER

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REMARKS

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LENGTH EXCEPTIONS RUN  
NUMBER

Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
						1				166
										166
								3-0/8		166
						1				167
						2				167
										167
						1		6-4/8		167
										168
						2	R1			168
						1	R1			168
							I			168
								6-6/8		168
										169
						2				169
						1				169
										169
						1		6-4/8		169
										170
						2				170
						1				170
										170
						1		6-0/8		170
										171
						1				171
						2				171
										171
						1		5-6/8		171
										172
						2				172
						1				172
										172
						1		6-0/8		172
										173
						2				173
						1				173
										173
						1		6-2/8		173
										174
						1	R1			174
						2	R1			174
							I			174
								6-4/8		174

MM11F,PJ  
RUN NAME

HNDWRP.V04 6/4/70

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A/P	PIN NAME	ORDER PIN	BAY # ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
Y DISC	H	C03S2	1-01							2				175
Y DISC	H	C03S1	1-02							1				175
Y DISC	H	F01B1	1-03							2				175
Y DISC	H	F03S2	1-04							1				175
Y DISC	H	F03S1	1-05											175
Y DISC			1									18-4/8		175
YUR (0=3)		C03E2	1-01							1				176
YUR (0=3)		F01H2	1-02											176
YUR (0=3)			1									11-0/8		176
YUR (4=7)		F01S2	1-01							1				177
YUR (4=7)		F03E2	1-02											177
YUR (4=7)			1									4-0/8		177
YNDR=0		C03K2	1-01							1				178
YNDR=0		C04M2	1-02											178
YNDR=0			1									3-0/8		178
YNDR=1		C03L2	1-01							1				179
YNDR=1		C04V2	1-02											179
YNDR=1			1									3-4/8		179
YNDR=2		C03M2	1-01							1				180
YNDR=2		C04L2	1-02											180
YNDR=2			1									3-0/8		180
YNDR=3		C03N2	1-01							1				181
YNDR=3		C04U2	1-02											181
YNDR=3			1									3-2/8		181
YNDR=4		F03K2	1-01							1				182
YNDR=4		F04T2	1-02											182
YNDR=4			1									3-4/8		182
YNDR=5		F03L2	1-01							1				183
YNDR=5		F04J2	1-02											183
YNDR=5			1									3-0/8		183
YNDR=6		F03M2	1-01							1				184
YNDR=6		F04S2	1-02											184
YNDR=6			1									3-0/8		184
YNDR=7		F03N2	1-01							1				185
YNDR=7		F04H2	1-02											185
YNDR=7			1									3-2/8		185

00117, P3  
NAME

HNDWRP, V04 6/4/70  
A/P PIN ORDER BAY •  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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REMARKS

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LENGTH EXCEPTIONS

RUN  
NUMBER

YPDR=0	C03J2	1-01																186
YPDR=0	C04A1	1-02																186
YPDR=0		1										3-2/8						186
YPDR=2	C03F2	1-01																187
YPDR=2	C04F2	1-02																187
YPDR=2		1										2-6/8						187
YPDR=3	C03H1	1-01																188
YPDR=3	C04P2	1-02																188
YPDR=3		1										3-4/8						188
YPDR=4	F03J2	1-01																189
YPDR=4	F04K2	1-02																189
YPDR=4		1										2-6/8						189
YPDR=5	F03E1	1-01																190
YPDR=5	F04B1	1-02																190
YPDR=5		1										3-2/8						190
YPDR=6	F03F2	1-01																191
YPDR=6	F04L2	1-02																191
YPDR=6		1										3-0/8						191
YPDR=7	F03H1	1-01																192
YPDR=7	F04C1	1-02																192
YPDR=7		1										3-0/8						192
YPR=1	C03E1	1-01																193
YPR=1	C04N2	1-02																193
YPR=1		1										3-4/8						193
YS (0=3)	C03U2	1-01																194
YS (0=3)	F01L2	1-02																194
YS (0=3)		1										9-6/8						194
YS (4=7)	F01N2	1-01																195
YS (4=7)	F03U2	1-02																195
YS (4=7)		1										3-4/8						195
YSW0	C03M1	1-01																196
YSW0	C03P1	1-02																196
YSW0	C04J2	1-03																196
YSW0		1										6-0/8						196

MM11F,P3  
RUN NAME

HNDWRP,V04 6/4//0  
A/P PIN ORDER DAY -  
NAME PIN ORDER

Q DRAW RV PG Y X Z

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REMARKS

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LENGTH EXCEPTIONS

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RUN  
NUMBER

YSW1		C03R2	1-01							2				197
YSW1		C03L1	1-02							1				197
YSW1		C04H2	1-03											197
YSW1			1									6-2/8		197
YSW2		C03R1	1-01							2				198
YSW2		C03K1	1-02							1				198
YSW2		C04U2	1-03											198
YSW2			1									6-4/8		198
YSW3		C03N1	1-01							2				199
YSW3		C03J1	1-02							1				199
YSW3		C04C1	1-03											199
YSW3			1									6-0/8		199
YSW4		F03M1	1-01							1				200
YSW4		F03P1	1-02							2				200
YSW4		F04N1	1-03											200
YSW4			1									5-4/8		200
YSW5		F03L1	1-01							2				201
YSW5		F04M1	1-02							1				201
YSW5		F03R2	1-03											201
YSW5			1									5-4/8		201
YSW6		F03K1	1-01							2				202
YSW6		F03R1	1-02							1				202
YSW6		F04V2	1-03											202
YSW6			1									6-2/8		202
YSW7		F03J1	1-01							2				203
YSW7		F03N1	1-02							1				203
YSW7		F04V1	1-03											203
YSW7			1									6-0/8		203



ERROR LISTING

DE WRAP  
JOB NAME

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PAGE 1

RESET 00  
RESET 00  
RESET 01  
RESET 01  
TSS

A/P	PIN NAME	ORDER PIN	BAY • ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
	L	E0102	1-01	H			R1			1			HND ORDER?	131
	L	C0101	1-02	H			R1			2			HND ORDER?	131
	L	C01E1	1-01	H			R1			1			HND ORDER?	132
	L	E0101	1-02	H			R1			2			HND ORDER?	132
	H	C01M2	1-01	H			R2			1			HND ORDER?	144