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MASTER DRAWING LIST

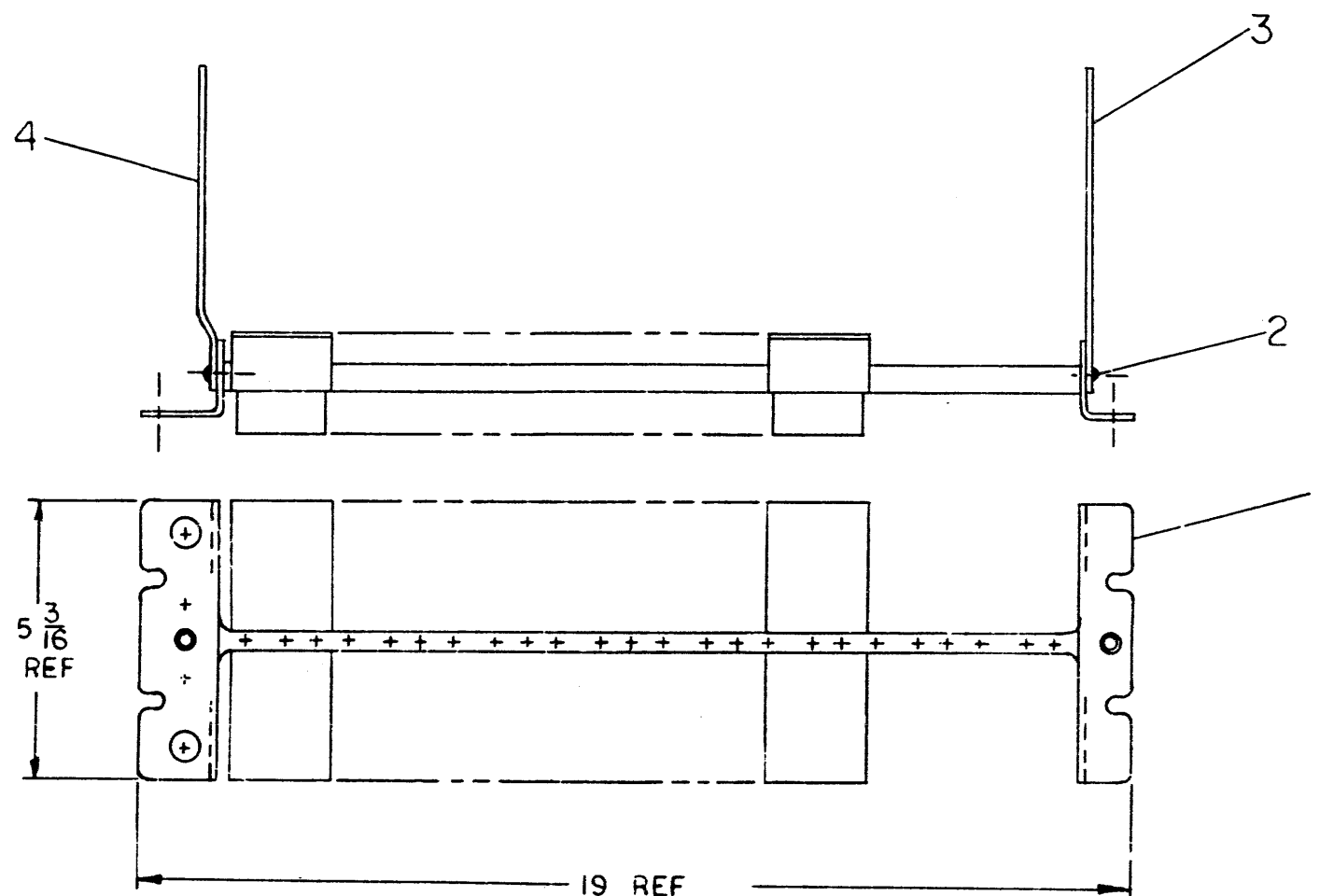
DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE
C-UA-DW08-0-0		1	BUS CONVERSION
A-PL-DW08-0-0		1	BUS CONVERSION, (PL)
C-DI-DW08-0-1	A	1	DRAWING INDEX LIST
D-MU-DW08-A-MU	C	1	MODULE UTILIZATION
A-PL-DW08-A-MU	C	1	MODULE UTILIZATION (PL)
D-BS-DW08-A-NC1	B	1	NEGATIVE CONVERSION 1
D-BS-DW08-A-NC2	B	1	NEGATIVE CONVERSION 2
D-BS-DW08-A-PC1	B	1	POSITIVE CONVERSION 1
D-BS-DW08-A-PC2	B	1	POSITIVE CONVERSION 2
D-IC-DW08-A-NBI		1	NEGATIVE BUS IN & OUT
D-IC-DW08-A-PS	A	1	POSITIVE BUS IN & OUT
C-AD-7005933-0-0		1	WIRED ASSY DW08-A
A-PL-7005933-0-0		1	WIRED ASSY DW08-A (PL)
K-WL-DW08-A-WL	D	1	WIRE LIST-DW08-A
A-SP-DW08-A-2		6	POSITIVE TO NEGATIVE BUS CONVERTER
A-SP-KA8I-0-3	///	8	PROGRAM DESCRIPTION
A-SP-KA8I-0-4	///	5	I/O LEVEL CONVERTER BUS CHECKOUT-PROCEDURE
A-AL-DW08-A-3		1	POSITIVE TO NEGATIVE BUS CONVERTER
C-CS-3009282-0-0		1	H716 POWER SUPPLY

REVISIONS				DRN.	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			
REV.	DATE	CHG. NO.	APP'D.	HUTNAK	8/12/68	TITLE BUS CONVERSION (POSITIVE)			
				CHK'D.	DATE				
A	2/28/69	00001	M.A.	A. PFYFFER	12/68				
B	3/13/69	00002	M.A.	ENG.	10/13/68				
C	3/27/69	00003	M.A.	PRO. ENG.	10/13/68				
D	5/69	KA8I-55	M.A.	MOD.	10/16/68				
E	10/69	00004	M.A.						
F	1/70	MISC. 64	M.A.						
G	5/70	00005	M.A.						
H	6/70	00006	M.A.						
K	9/70	00007	M.A.						
				FIRST USED ON		SIZE	CODE	NUMBER	REV.
				SCALE	NONE	A	ML	DW08-A	K
				SHEET	1	OF	1	DIST.	

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NOTES:

1. REFER TO DRAWING INDEX
NO. C-DI-DW08-0-1



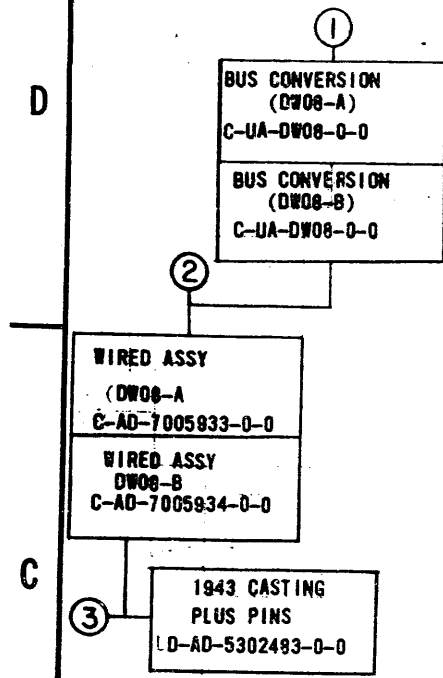
FIRST USED ON OPTION / MODEL		QTY.		DESCRIPTION		PART NO.		IT N	
PDP-8I									
UNLESS OTHERWISE SPECIFIED		DRN		DATE		PARTS LIST			
UNLESS OTHERWISE SPECIFIED		CHK'D		DATE		digital EQUIPMENT CORPORATION			
DIMENSION IN INCHES		ENG		DATE		WATNARD MASSACHUSETTE			
TOLERANCES		ENG		DATE		TITLE			
DECIMALS FRACTIONS ANGLES		DRN		DATE		BUS CONVERSION			
± .008 ± 1/64 ± 0°30'		ENG		DATE					
FIRM SURFACE QUALITY		DRN		DATE					
REMOVE BURRS AND BREAK SHARP CORNERS		FIN		DATE					
MATERIAL		NEXT HIGHER ASSY		DATE					
+ +		A-ML-DW08-A		DATE					
FINISH		SCALE NONE		DATE					
+ +		SHEET 1 OF 1		DATE					
				SIZE CODE		NUMBER		REV.	
				CJA		DW08-0-0			
				DIST.					

REV.	
NUMBER	017000 & α
SIZE CODE	CIA

[illegible]

DEC FORM NO.
DRA 110

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MECHANICAL				DEPT USAGE			ELECTRICAL				DEPT USAGE		
FIND NO	DESCRIPTION	PART NO.	PROD	CUST	F/C		FIND NO	DESCRIPTION	PART NO.	PROD	CUST	F/C	
1	BUS CONVERSION BUS CONVERSION (PL) PANEL, RIGHT END PANEL, LEFT END	C-UA-DW08-0-0 A-PL-DW08-0-0 C-MD-5302486-0-0 C-MD-5302485-0-0					1	BUS CONVERSION (POSITIVE) MODULE UTILIZATION MODULE UTILIZATION (PL) NEGATIVE CONVERSION 1 NEGATIVE CONVERSION 2 POSITIVE CONVERSION 1 POSITIVE CONVERSION 2 NEGATIVE BUS IN & OUT POSITIVE BUS IN & OUT WIRE LIST, DW08-A ACCESSORY LIST ACCESSORY LIST BUS CONVERSION (NEGATIVE) MODULE UTILIZATION MODULE UTILIZATION (PL) NEGATIVE CONVERSION 1 NEGATIVE CONVERSION 2 POSITIVE CONVERSION 1 POSITIVE CONVERSION 2 NEGATIVE BUS IN & OUT POSITIVE BUS IN & OUT WIRE LIST, DW08-B	A-ML-DW08-A D-MD-DW08-A-MU A-PL-DW08-A-MU D-BD-DW08-A-NC1 D-BD-DW08-A-NC2 D-BD-DW08-A-PC1 D-BD-DW08-A-PC2 D-IC-DW08-A-NB1 D-IC-DW08-A-PS K-WL-DW08-A-WL A-AL-DW08-A-3 A-AL-DW08-B-3 A-ML-DW08-B D-MU-DW08-B-MU A-PL-DW08-B-MU D-BD-DW08-B-NC1 D-BD-DW08-B-NC2 D-BD-DW08-B-PC1 D-BD-DW08-B-PC2 D-IC-DW08-B-NB1 D-IC-DW08-B-PS K-WL-DW08-B-WL				
2	WIRED ASSY, DW08-A WIRED ASSY, DW08-A (PL) WIRED ASSY, DW08-B WIRED ASSY, DW08-B (PL) LOGIC FRAME DECATS	C-AD-7005933-0-0 A-PL-7005933-0-0 C-AD-7005934 A-PL-7005934 A-DC-7406371-0-0											
3	1943 CASTING PLUS PINS 1943 CASTING PLUS PINS (PL) 1943 FRAME CASTING	D-AD-5302483-0-0 A-PL-5302483-0-0 E-MD-1202885-0-0											

REVISIONS		REV.	DATE	BY
CHK	CHANGE NO.	A	4-7-70	T. Sullivan
FV	MISC- 00064			ARSENAL
				17-5-70

ASSY DWG NO. C-UA-DW08-0-0

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS FRACTIONS ANGLES
± .005 ± 1/64 ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL
+ + +

FINISH
+ + +

DRN	DATE	9/7/68
CHK'D	DATE	12-10-68
ENG	DATE	10/11/68
PROJ. ENG.	DATE	10/11/68
PROD.	DATE	10/11/68
FIRST USED ON		

PARTS LIST		digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
TITLE		DRAWING INDEX LIST	

SIZE CODE	NUMBER	REV.
C	DIDW08-0-1	A
DIST.	G	

DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY R. HUTNAK

DATE 8/9/68

ENG 17 *Augustine*

DATE 10/13/88

CHECKED *at Charles*

DATE 10-13-68

PROD *H. Gochney*

DATE 10/16/68

SECTION

1

ISSUED SECT.

1

QUANTITY / VARIATION

DW08-A

1

14

2

3

ITEM
NO.

DWG NO. / PART NO.

DESCRIPTION

M101

BUS DATA INTERFACE

M651

NEGATIVE OUTPUT CONVERTER

M907

DIODE CLAMP

M517

BUS CONVERTER

TITLE

MODULE UTILIZATION

ASSY NO.

D-MU-DW08-A-MU

SIZE	CODE
------	------

A PL

NUMBER

DW08-A-MU

REV.

C

ECO NO.	
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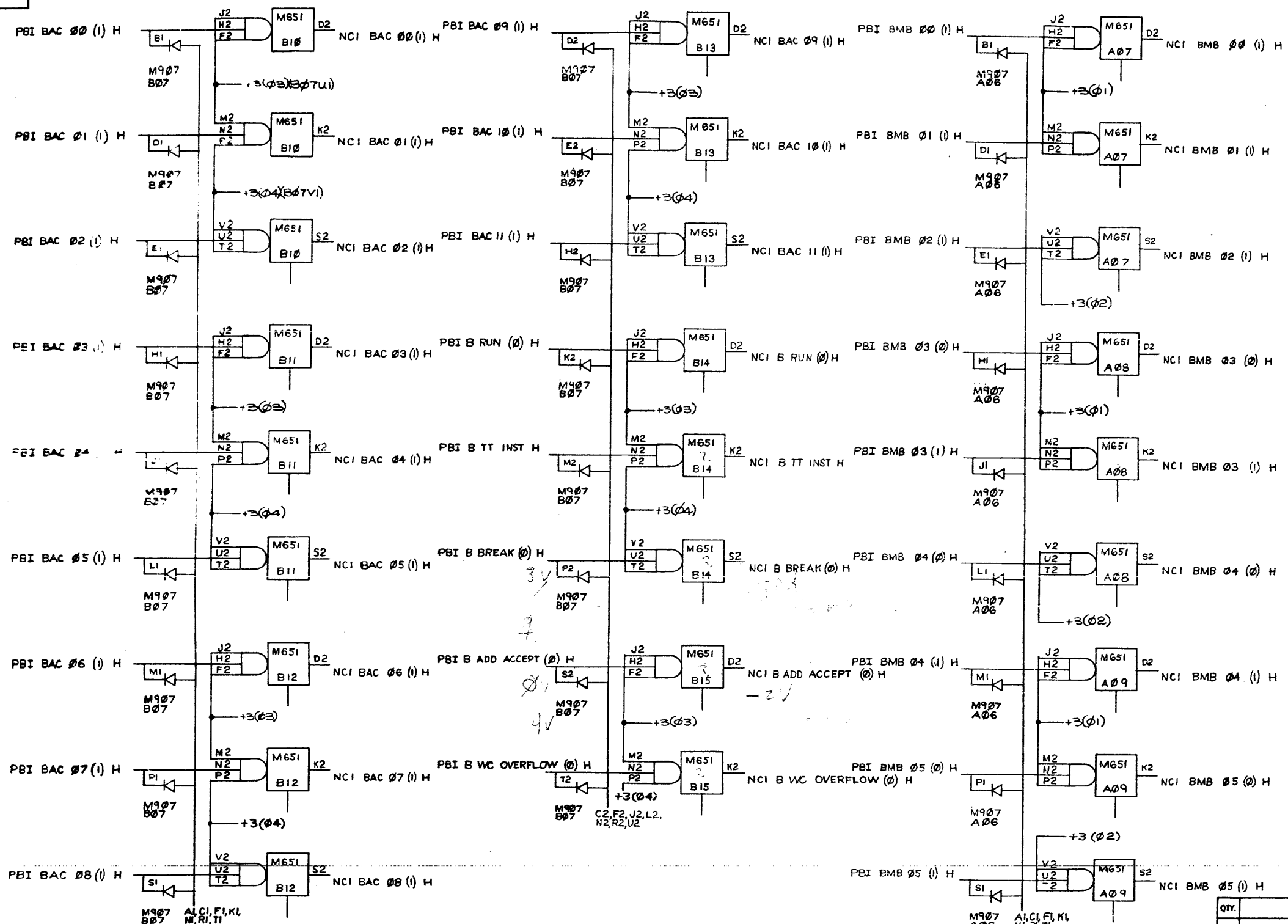
DW08A-
00006

DEC FORM NO.
DRA 110

SHEET 1 OF 1

		DIST.
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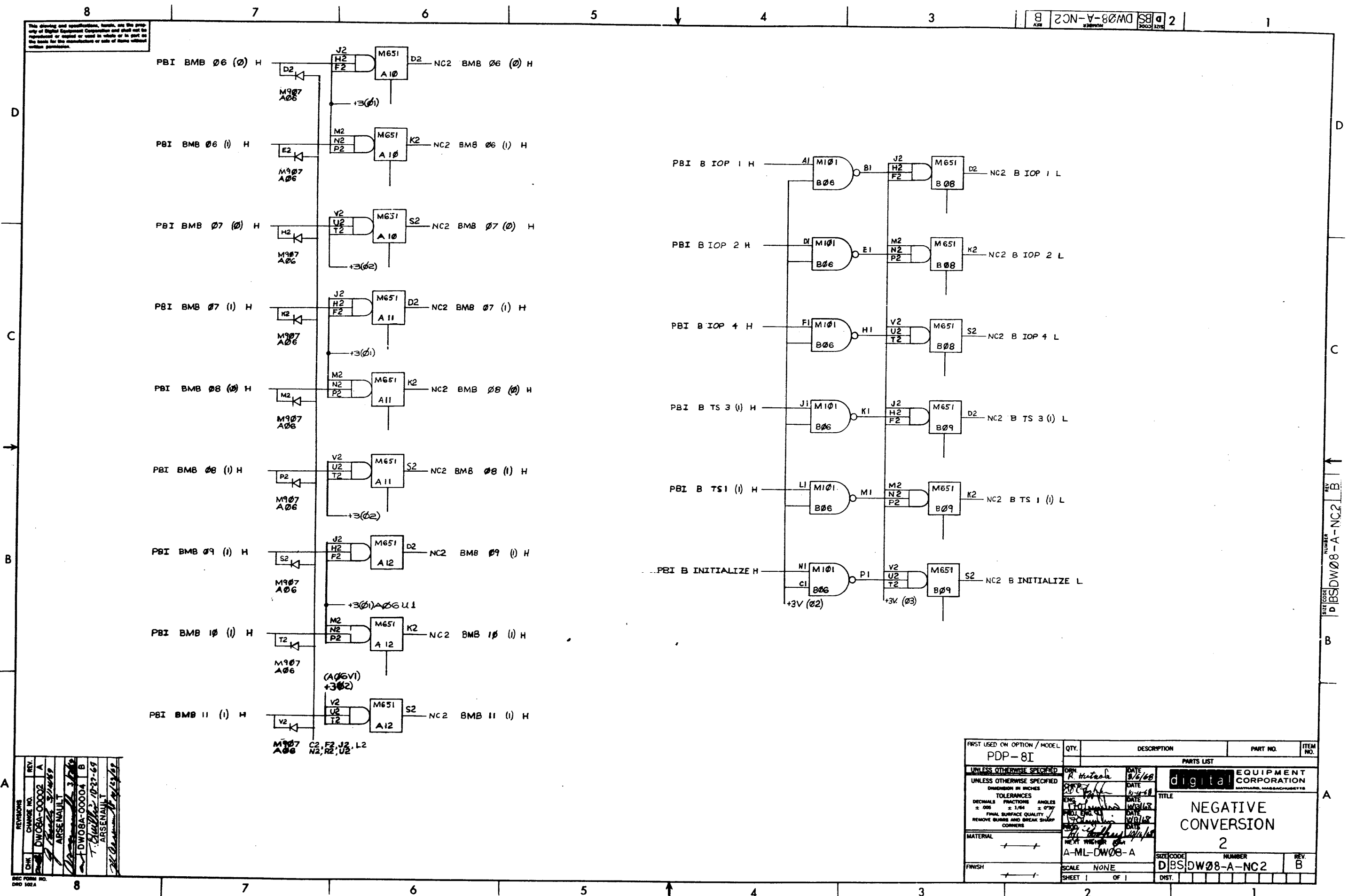


REV	CHG	NO	DATE	BY	CHK
1		1	10/10/68	ARSENAL	
2		2	10/10/68	ARSENAL	
3		3	10/10/68	ARSENAL	
4		4	10/10/68	ARSENAL	
5		5	10/10/68	ARSENAL	
6		6	10/10/68	ARSENAL	
7		7	10/10/68	ARSENAL	
8		8	10/10/68	ARSENAL	

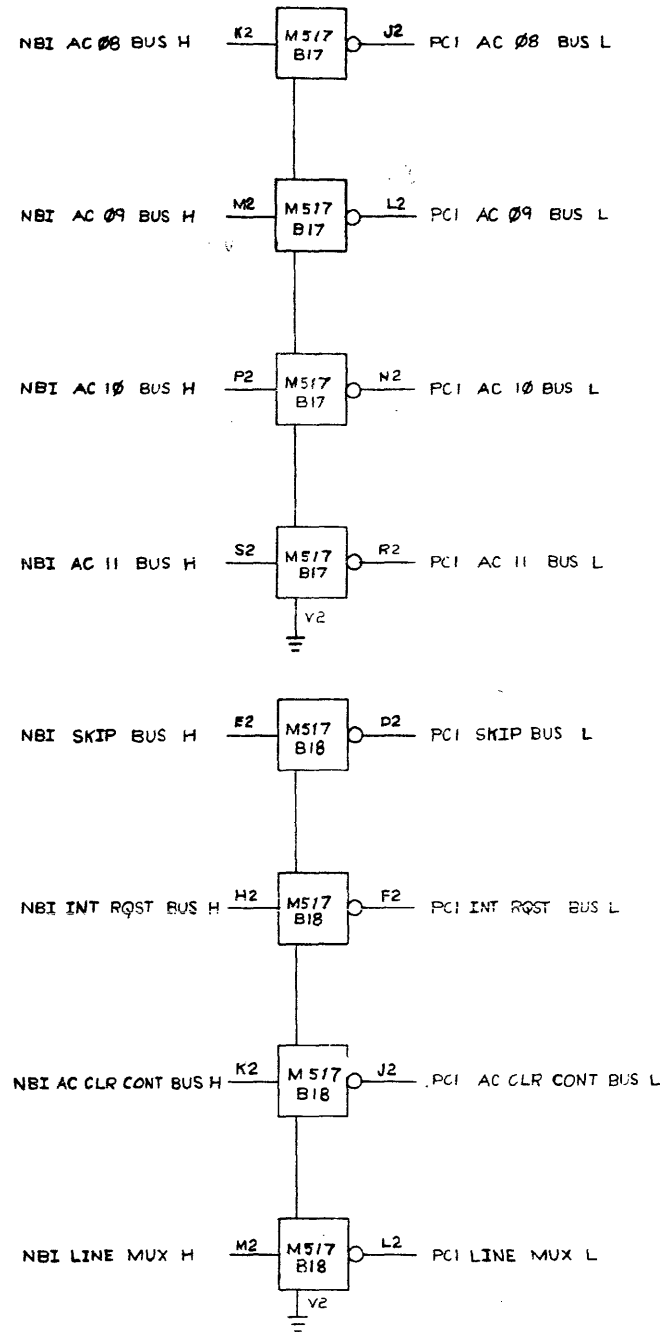
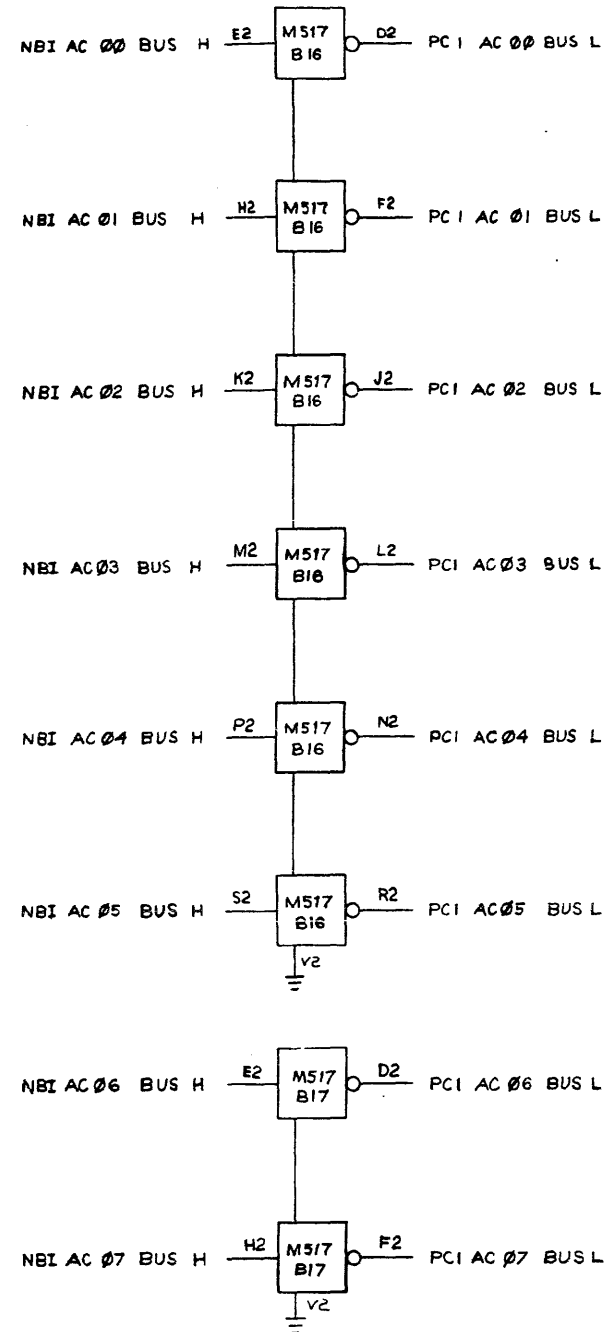
FIRST USED ON OPTION / MODEL
PDP-8I

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS FRACTIONS ANGLES
± .005 ± 1/64 ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			
digital EQUIPMENT CORPORATION BAYHARD, MASSACHUSETTS			
TITLE NEGATIVE CONVERSION			
NEXT HIGHER ASSY. A-ML-DW08-A			
SCALE NONE			
SHEET 1 OF 1			
REV B			

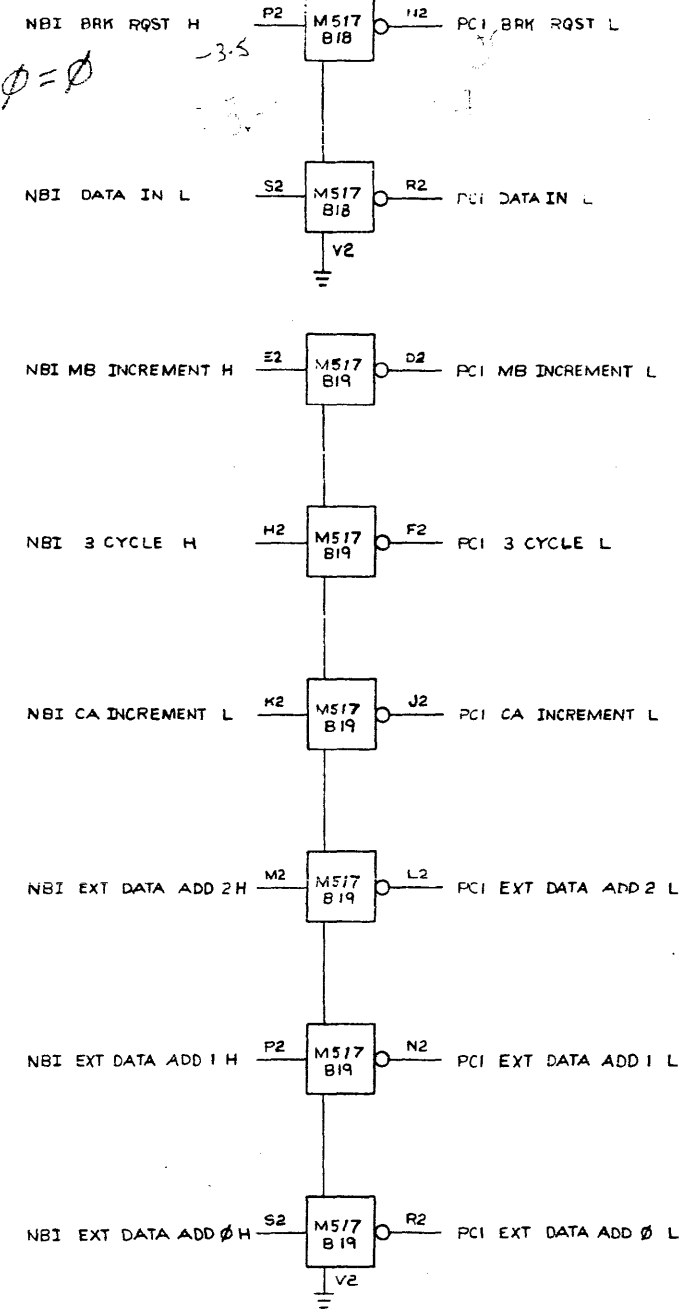


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H=-3

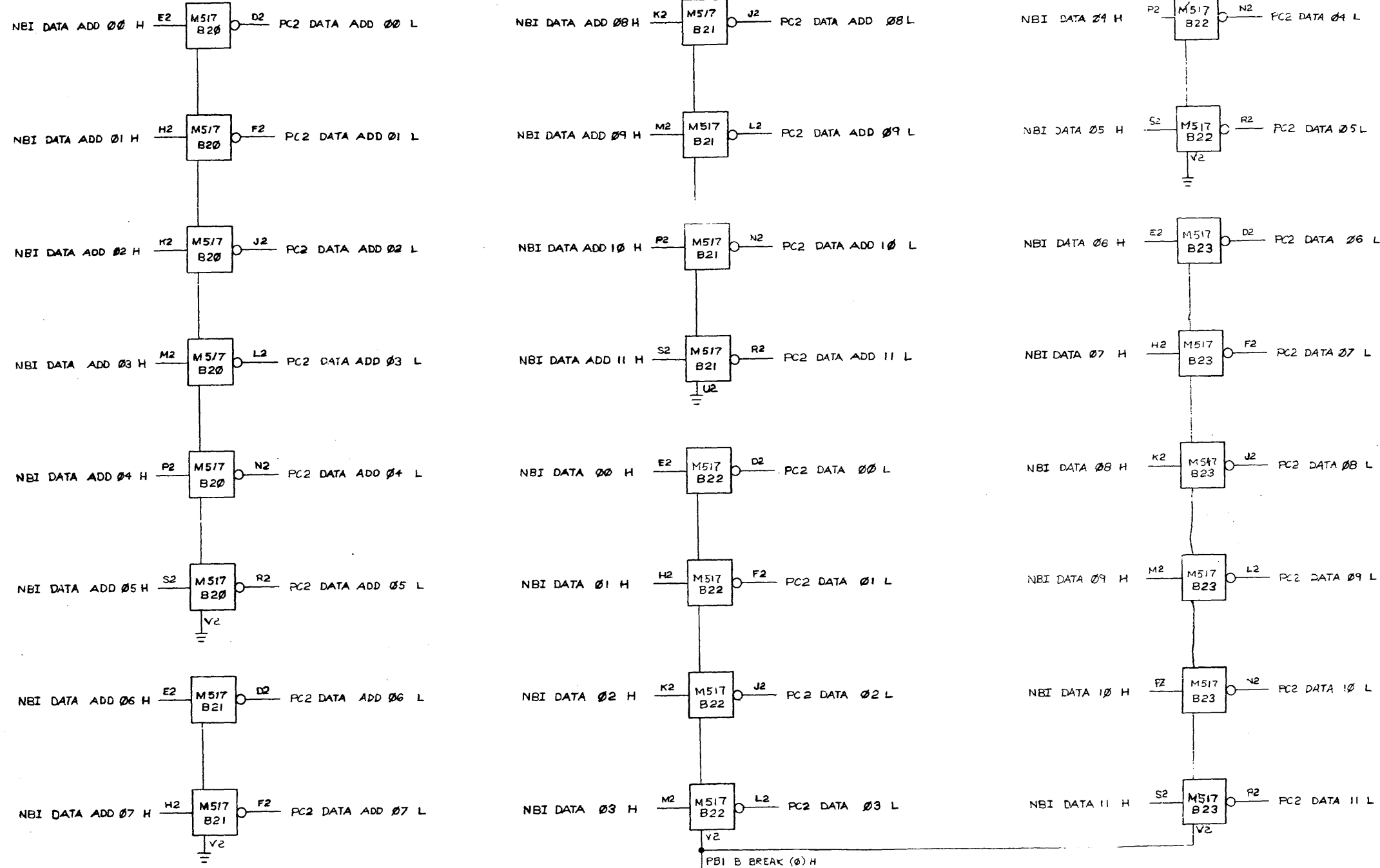
$\phi = \phi$



REV.	DATE	BY	CHK	DESCRIPTION
1	10/10/68	M. ARSENAULT		REVISION
2	10/10/68	M. ARSENAULT		REVISION
3	10/10/68	M. ARSENAULT		REVISION
4	10/10/68	M. ARSENAULT		REVISION
5	10/10/68	M. ARSENAULT		REVISION
6	10/10/68	M. ARSENAULT		REVISION
7	10/10/68	M. ARSENAULT		REVISION
8	10/10/68	M. ARSENAULT		REVISION

FIRST USED ON OPTION MODEL PDP-8I	QTY.	DESCRIPTION	PART NO.	ITEM NO.	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES ± .006 ± 1/64 ± 0°30' FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS					DATE 10/10/68 DATE 10/10/68 DATE 10/10/68 DATE 10/10/68 DATE 10/10/68
PARTS LIST digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS					
TITLE POSITIVE CONVERSION					
NEXT HIGHER ASSY A-ML-DW08-A					
SCALE NONE					
SHEET 1 OF 1					
DIST.					

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REV.	CHANGE NO.	DATE	BY	CHK
A	1	10/10/68	M. ARSENAULT	
B	2	10/10/68	M. ARSENAULT	
C	3	10/10/68	M. ARSENAULT	
D	4	10/10/68	M. ARSENAULT	

DEC FORM NO. 102A

FIRST USED ON OPTION / MODEL PDP-8I		QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES ± .005 ± 1/64 ± 0°30' FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS		PARTS LIST digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			
MATERIAL + + +		TITLE POSITIVE CONVERSION 2			
FINISH + + +		SCALE NONE SHEET 1 OF 1			
		SIZE CODE D B S D W 08 - A - P C 2			
		NUMBER B			
		REV. B			

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18N-A-80W08-2

W011
A13

C2	NC1 BAC 00 (i) H
D2	NC1 BAC 01 (i) H
F2	NC1 BAC 02 (i) H
H2	NC1 BAC 03 (i) H
J2	NC1 BAC 04 (i) H
L2	NC1 BAC 05 (i) H
M2	NC1 BAC 06 (i) H
N2	NC1 BAC 07 (i) H
P2	NC1 BAC 08 (i) H

W011
A14

C2	NC1 BAC 09 (i) H
D2	NC1 BAC 10 (i) H
F2	NC1 BAC 11 (i) H
H2	NC2 B IOP 1 L
J2	NC2 B IOP 2 L
L2	NC2 B IOP 4 L
M2	NC2 B TS 3 (i) L
N2	NC2 B TS 1 (i) L
P2	NC2 B INITIALIZE L

W011
A15

C2	NC1 BMB 00 (i) H
D2	NC1 BMB 01 (i) H
F2	NC1 BMB 02 (i) H
H2	NC1 BMB 03 (i) H
J2	NC1 BMB 04 (i) H
L2	NC1 BMB 05 (i) H
M2	NC1 BMB 06 (i) H
N2	NC1 BMB 07 (i) H
P2	NC1 BMB 08 (i) H

W011
A16

C2	NC2 BMB 06 (i) H
D2	NC2 BMB 06 (i) H
F2	NC2 BMB 07 (i) H
H2	NC2 BMB 07 (i) H
J2	NC2 BMB 08 (i) H
L2	NC2 BMB 08 (i) H
M2	NC2 BMB 09 (i) H
N2	NC2 BMB 10 (i) H
P2	NC2 BMB 11 (i) H

W011
A17

C2	NBI AC 00 BUS H
D2	NBI AC 01 BUS H
F2	NBI AC 02 BUS H
H2	NBI AC 03 BUS H
J2	NBI AC 04 BUS H
L2	NBI AC 05 BUS H
M2	NBI AC 06 BUS H
N2	NBI AC 07 BUS H
P2	NBI AC 08 BUS H

W011
A18

C2	NBI AC 09 BUS H
D2	NBI AC 10 BUS H
F2	NBI AC 11 BUS H
H2	NBI SKIP BUS H
J2	NBI INT RQST BUS H
L2	NBI AC CLR CONT BUS H
M2	NC1 B RUN (i) H
N2	NC1 B TT INST H
P2	NBI LINE MUX H

W011
A19

C2	NBI DATA ADD 00 H
D2	NBI DATA ADD 01 H
F2	NBI DATA ADD 02 H
H2	NBI DATA ADD 03 H
J2	NBI DATA ADD 04 H
L2	NBI DATA ADD 05 H
M2	NBI DATA ADD 06 H
N2	NBI DATA ADD 07 H
P2	NBI DATA ADD 08 H

W011
A20

C2	NBI DATA ADD 09 H
D2	NBI DATA ADD 10 H
F2	NBI DATA ADD 11 H
H2	NBI BRK RQST H
J2	NBI DATA IN L
L2	NC1 B BREAK (i) H
M2	NC1 B ADD ACCEPT (i) H
N2	NBI MB INCREMENT H
P2	

W011
A21

C2	NBI DATA 00 H
D2	NBI DATA 01 H
F2	NBI DATA 02 H
H2	NBI DATA 03 H
J2	NBI DATA 04 H
L2	NBI DATA 05 H
M2	NBI DATA 06 H
N2	NBI DATA 07 H
P2	NBI DATA 08 H

W011
A22

C2	NBI DATA 09 H
D2	NBI DATA 10 H
F2	NBI DATA 11 H
H2	NBI 3 CYCLE H
J2	NBI CA INCREMENT L
L2	NC1 BWC OVERFLOW (i) H
M2	
N2	
P2	

W011
A23

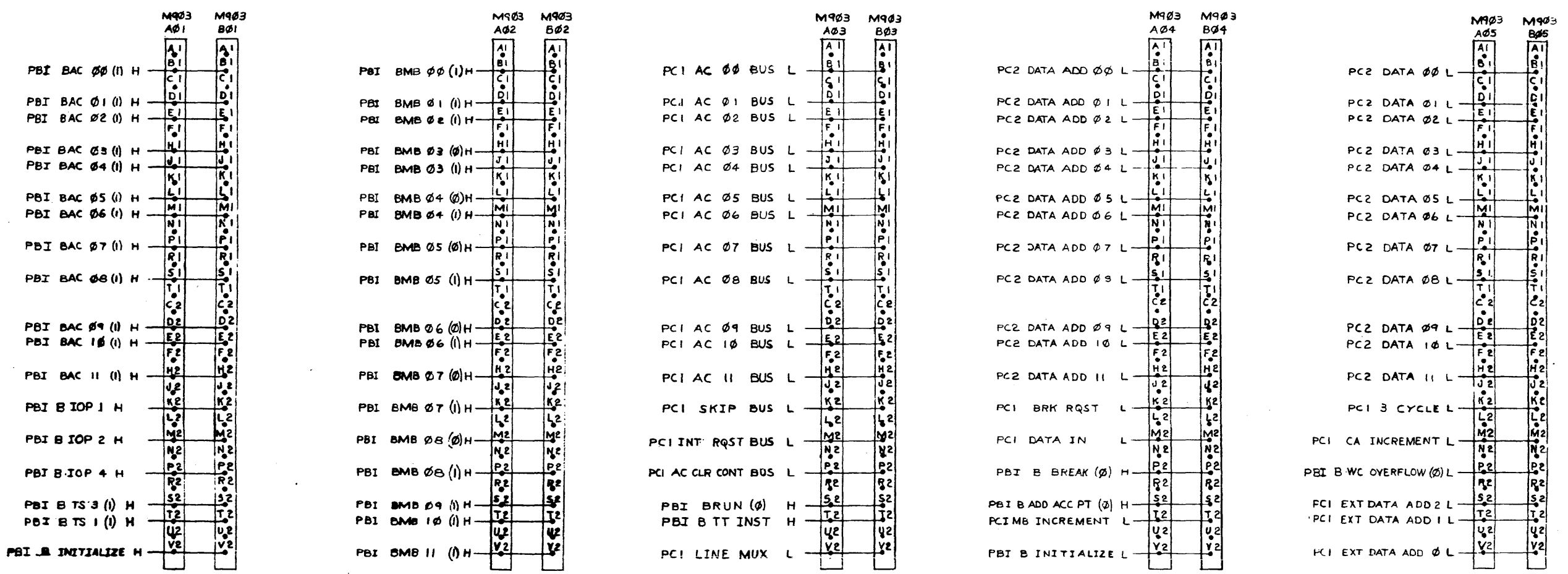
C2	NBI EXT DATA ADD 2 H
D2	NBI EXT DATA ADD 1 H
F2	NBI EXT DATA ADD 0 H
H2	
J2	
L2	
M2	
N2	
P2	

PINS C,F,J,L,N,R & U ARE GROUNDED ON ALL W011'S

REV. 1
CHANGE NO. 1
CHK

FIRST USED ON OPTION/MODEL PDP-8I	QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED				
DIMENSION IN INCHES				
TOLERANCES				
DECIMALS	FRACTIONS	ANGLES		
± .005	± 1/64	± 0°30'		
FINAL SURFACE QUALITY				
REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL	NEXT HIGHER ASST			
FINISH	SCALE NONE			
SHEET 1 OF 1				
PARTS LIST				
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				
TITLE NEGATIVE BUS IN AND OUT				
SIZE CODE D1C DW08-A-NBI				
NUMBER REV.				

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PINS A1, C1, F1, K1, N1, R1, T1, C2, F2, J2, L2, N2, R2 & U2 ARE GROUNDED ON ALL M903'S

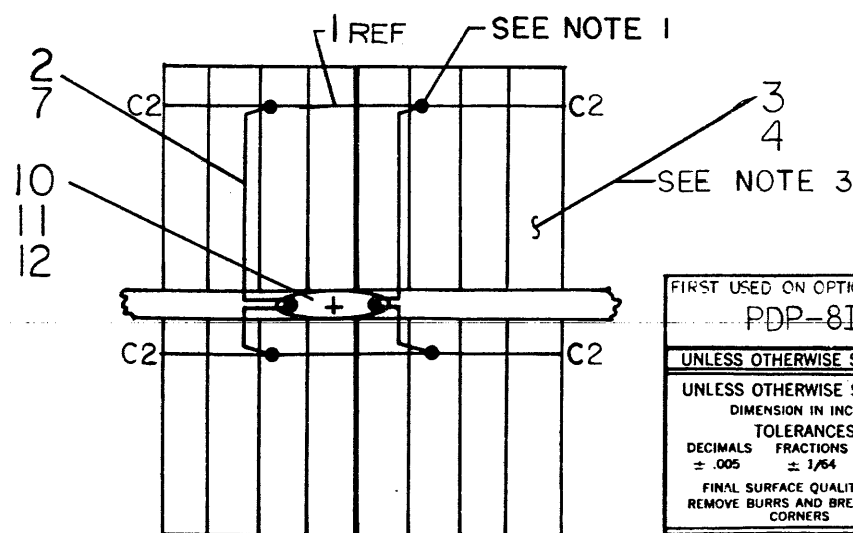
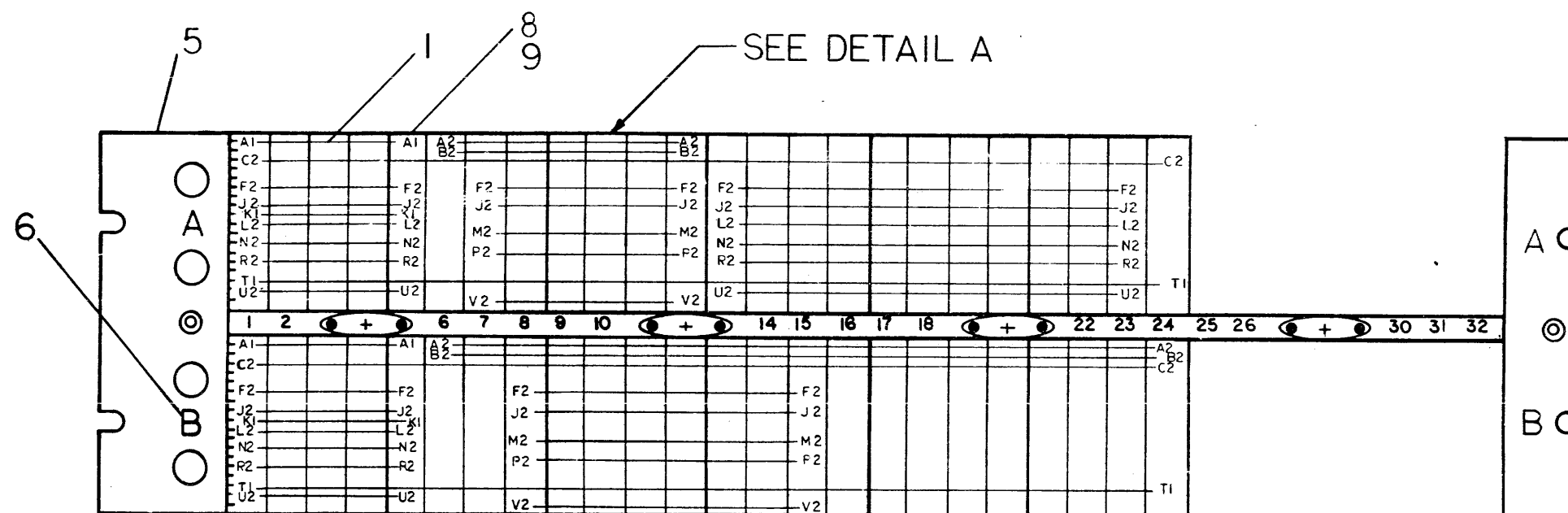
REV.	DATE	BY	CHKD.
1	10/1/68	W. P. B.	W. P. B.
2	10/1/68	W. P. B.	W. P. B.
3	10/1/68	W. P. B.	W. P. B.
4	10/1/68	W. P. B.	W. P. B.
5	10/1/68	W. P. B.	W. P. B.
6	10/1/68	W. P. B.	W. P. B.
7	10/1/68	W. P. B.	W. P. B.
8	10/1/68	W. P. B.	W. P. B.

FIRST USED ON OPTION/MODEL PDP-8I		QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINISH REMOVE BURRS AND BREAK SHARP CORNERS		PARTS LIST			
MATERIAL NEXT HIGHER ASSY		digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			
FINISH NEXT HIGHER ASSY		TITLE POSITIVE BUS IN AND OUT			
SCALE NONE		SIZE CODE D1C		NUMBER DW08-A-PS	REV A
SHEET 1 OF 1		DST.			

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NOTES:

1. CONNECTIONS ON ITEMS *1 & *2 TO BE SOLDERED AND LOCATED AT MINIMUM PRACTICAL HEIGHT ABOVE BOARD.
2. ALL CONN BLOCKS TO BE GROUNDED TO GND LUGS AS SHOWN.
3. USE YELLOW WIRE (ITEM *3) FOR MACHINE WRAPPED & BLUE WIRE (ITEM *4) FOR HAND WRAPPED WIRING.



DETAIL A
3 PLACES
SEE NOTE 2

FIRST USED ON OPTION/MODEL PDP-8I	QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED				
UNLESS OTHERWISE SPECIFIED				
DIMENSION IN INCHES				
TOLERANCES				
DECIMALS FRACTIONS ANGLES				
± .005 ± 1/64 ± 0°30'				
FINAL SURFACE QUALITY				
REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL				
FINISH				
DRN <i>K. H. Hutton</i> DATE 8/6/68				
CHKD <i>W. J. F. T.</i> DATE 10-11-68				
ENG <i>W. J. F. T.</i> DATE 10/11/68				
PROJ. ENG <i>W. J. F. T.</i> DATE 10/11/68				
PROD. <i>W. J. F. T.</i> DATE 10/11/68				
NEXT HIGHER ASSY				
C-UA-DWØ8-Ø-Ø				
SCALE NONE				
SHEET 1 OF 1				
PARTS LIST				
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS				
TITLE				
WIRED ASSY DWØ8-A				
SIZE CODE NUMBER REV.				
CAD 7005933-0-0				
DIST.				

[illegible]

DEC FORM NO.
DRA 110

DRWG NO	REV LTR
K-WL-DWØ8-A-WL	D

REVISIONS			
REV LTR	ECO NO	DATE	ENG
A	DWØ8A-00001	3/14/69	W. J. A.
B	DWØ8A-00002	3/14/69	W. J. A.
C	DWØ8A-00003	3-27-69	W. J. A.
D	DWØ8A-00005	6-2-70	W. J. A.

DRAWN <i>W. J. A.</i>	DATE 8/29/68	 EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE WIRE LIST DWØ8-A	
CHECKED <i>W. J. A.</i>	DATE 10-12-68		FOR TAPE* FILE*	
ENG <i>W. J. A.</i>	DATE 10/13/68		SIZE K	CODE WL
PROJ ENG <i>W. J. A.</i>	DATE 10/13/68		DWG. NO. DWØ8-A-WL	
PROD <i>W. J. A.</i>	DATE 10/14/68	ASSY NO C-UA-DWØ8-Ø-Ø	REV LTR D	
SCALE NONE		SHEET 1 OF 1	DIST.	

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE DWØ8A POSITIVE TO NEGATIVE BUS CONVERTER			
M1Ø1 module before level conversion in the M65Ø modules. The Negative Bus outputs on eleven WØ11 or WØ31 cable connectors at locations A13 to A23. Input signals within the Negative Bus are connected to an input clamp, difference amplifiers, and level converters within the eight M5Ø7 modules. The output of the M5Ø7 is an open collector with a reverse diode clamp to ground. The M5Ø7 module converts a high level in (Ø volts) to a low level out (Ø volts) and a low level in (-3 volts) to a high level out (+3 volts); both the Negative and Postive Buses' input signals are active when clamped to ground (Ø volt). Delays occur within the DWØ8A unit and effect both the input and output signals within the Buses. A maximum propagation delay of 1ØØ nanoseconds exists in the output timing signals (BIOP1, BIOP2, BIOP4, BTS3(1), BTS1(1) and INITIALIZE), a maximum propagation delay of 6Ø nanoseconds exists for the other output signals. The input signals propagation delay to a ground level in the M5Ø7 module is maximum at 7Ø nanoseconds. This ground level is held on the Positive Bus for a minimum of 1ØØ nanoseconds after removal of the initiating signal on the Negative Bus; this is to accomodate the conflict between the 5ØØ nanoseconds PDP8/I placement of the I/O STROBE signal on the Positive Bus and the utilization of 4ØØ nanosecond pulses			
SIZE	CODE	NUMBER	REV
A	SP	DWØ8-A-2	

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE DWØ8A POSITIVE TO NEGATIVE BUS CONVERTER			
on the Negative Bus. The round trip propagation delay (1ØØ nanoseconds plus 7Ø nanoseconds) of the timing signals reduces the cable length allowed between the computer and the peripheral. At a rate of 3 microseconds per round trip foot, the cable length reduction for 17Ø nanoseconds delay is approximately 57 feet; for the KA8I Positive Bus a total of 23 feet of cable is allowed. The existance of a maximum option delay as in the KA8I specification is assumed. (A maximum of 14 feet for flexprint cable is still applicable.) The half transistions of unterminated signals exist upon both Buses with their duration dependent on cable lengths and placement of the DWØ8A upon the Positive Bus. 1.2 Options usual to the PDP8/I Negative Bus are accomodated by this conversion unit on the Positive Bus. 1.3 The option is mounted upon a single mounting panel with 48 connectors (6 connector blocks) and an integral power supply. The panel can be mounted in standard 19 inch racks. A cabinet depth of 15 inches is required for the power supply. 1.4 The environmental specifications are those of the PDP8/I. The DC logic voltages +5 volts (at 1.Ø amperes) and -15 volts (at 1.5 amperes) are provided by the integral power supply, noted in section 2. 1.5 <u>General Performance Specifications</u>			
SIZE	CODE	NUMBER	REV
A	SP	DWØ8-A-2	

ENGINEERING SPECIFICATION

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CONTINUATION SHEET

TITLE DWØ8A POSITIVE TO NEGATIVE BUS CONVERTER

DWØ8A accepts and outputs a Positive Bus compatible to the KA8I. These signals are converted to a Negative Bus compatible to that usual on the PDP8/I but having a reduced total cable length of 23 feet. The cable lengths on both the Positive and Negative Buses must be included. (The restriction of flexprint to 14 feet is still applicable.) The placement of the DWØ8A on the Positive Bus does not compromise its loading.

2.Ø SPECIFICATION OF VENDOR-SUPPLIED EQUIPMENT

The integral power supply is from Wanlass Electric Company, Model C-148.

AC Inputs: 12Ø or 24Ø V AC $\pm 1\%$, 5Ø to 6Ø HZ, single phase.

Input is connected for 12Ø V AC operation (T1-1 connected to T1-3, T1-2 connected to T1-4).

For 24Ø V AC operation remove the 12Ø V AC connections and connect T1-2 to T1-3.

Input is applied to T1-1 and T1-4.

DC Outputs: (1) +5 V DC, Ø to 3.Ø amperes.
Regulation: $\pm 1.5\%$ maximum, line or load
Ripple: Less than Ø.5% RMS.

(2) -5 V DC, Ø to 1.5 amperes.
Regulation: +5% maximum, line or load
Ripple: Less than 1.5% RMS.

3.Ø PROGRAMMING

No programming considerations exist.

SIZE	CODE	NUMBER	REV
A	SP	DWØ8-A-2	

ENGINEERING SPECIFICATION

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CONTINUATION SHEET

TITLE DWØ8A POSITIVE TO NEGATIVE BUS CONVERTER

4.Ø INTERFACE SPECIFICATIONS

The physical and electrical interfaces are standard to the respective Buses.

SIZE	CODE	NUMBER
A	SP	DWØ8-A-2

ACCESSORY LIST

D	DOCUMENT
DN	DOCUMENT CHANGE NOTICE
DA	PAPER TAPE ASCII
DB	PAPER TAPE BINARY
PM	PAPER TAPE READ-IN-MODE

KIT CHECK _____
BY _____ DATE _____
INSTALLATION CHECK _____
BY _____ DATE _____

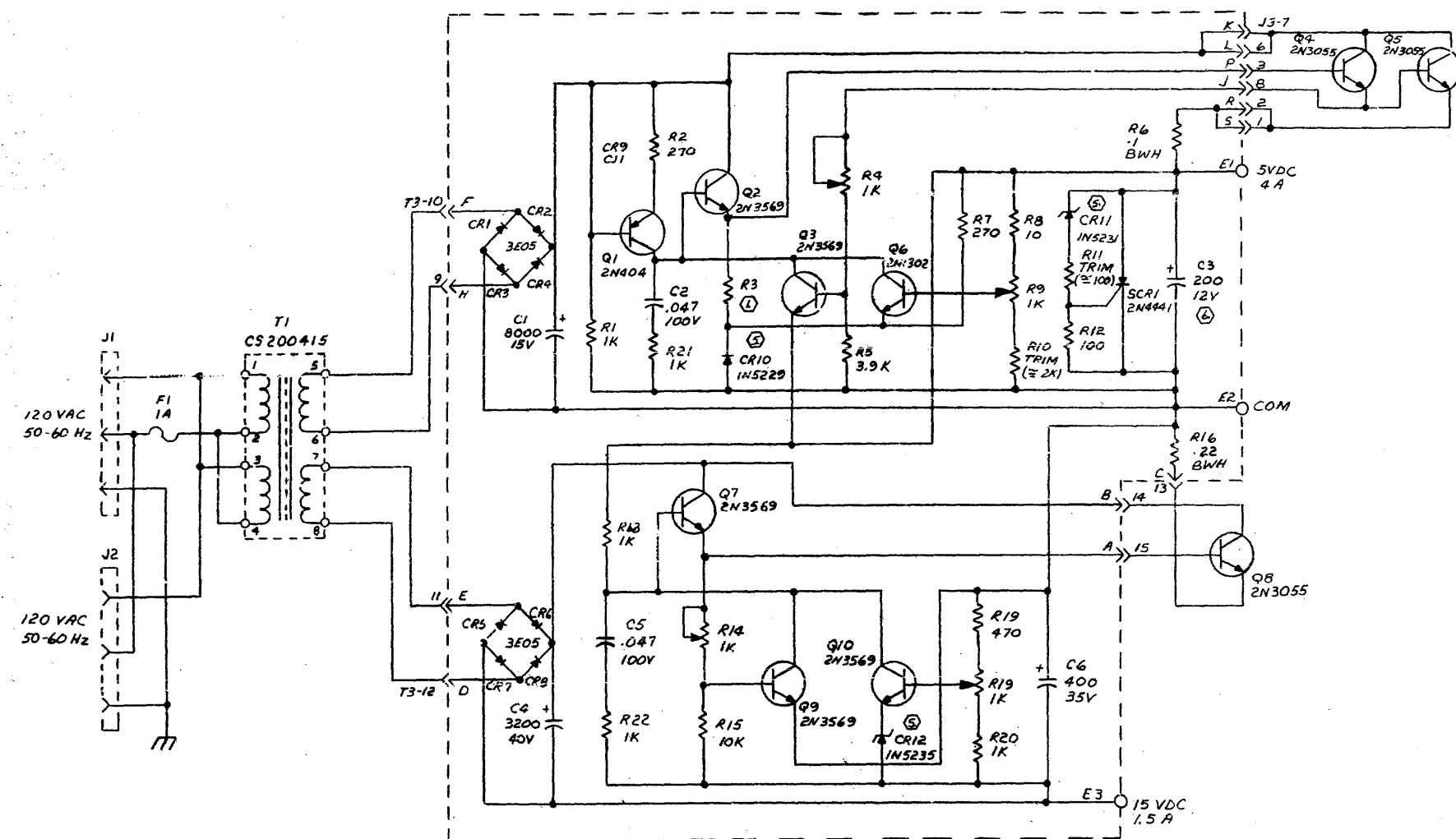
ISSUED SECT.

DEC FORM NO.
DRA 121

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NOTES:

1. R3 IS A TRIM VALUE RESISTOR WITH AN APPROX VALUE OF "OPEN"
2. ALL RESISTANCE VALUES ARE EXPRESSED IN OHMS.
3. ALL RESISTORS ARE FIXED. COMPOSITION. 1/2 W, $\pm 10\%$
4. ALL CAPACITOR VALUES ARE EXPRESSED IN MICROFARADS
5. CR10 MAY BE MOTOROLA NO. SZ13477-2
CR11 MAY BE MOTOROLA NO. SZ13477-4
CR12 MAY BE MOTOROLA NO. SZ13477-5
6. CAPACITORS C3 MAY BE TANTALUM 47UF, 6.3V
7. RESISTANCE VALUE FOR R10 & R11 MAY BE CHANGED DURING FINAL TEST.



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REV.	CHG.	NO.	REV.
1	3009282-0000	C	REDRAWN & REVISED

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN. M. T. O'NEILL	DATE 3-10-72	digital EQUIPMENT CORPORATION WATFORD, MASSACHUSETTS	
DECIMALS .005 XX .02 X .1	CHKD. M. E. O'NEILL	DATE 3-16-72		
ANGLES 10° 30'	ENG. M. E. O'NEILL	DATE 3-17-72	TITLE H-716P.S.	
REMOVE BURRS AND BREAK SHARP CORNERS SURF. A. QUALITY	PROD. D. O'NEILL	DATE 3-20-72		
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV.
FINISH	SCALE NONE	DCS 3009282-0-0	C	
SHEET 1 OF 1	DIST. 10			

[illegible]

