digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET ☐☐☐☐

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MODULE UTILIZATION (8K)	D-MU-11/Ø5-Ø-Ø1
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*11/Ø5 ACCEPTANCE PROC.	A-SP-11/Ø5-Ø-6
*DECAL (10.5" BOX)	A-DC-7411305-0-0
*PKG. INST. CUSTOMER (5¼")	A-SP-3700061-0-0
AWT REVISION STATUS	A-WT-7008843-2
POWER SUPPLY	D-UA-7008731-0-0
*PKG. INST. INPLANT (5¼")	A-SP-3700133-0-0
*PKG. INST. CUSTOMER (10½") BOX	A-SP-3700098-0-0
*PKG. INST. INPLANT (10½") BOX	A-SP-3700156-0-0

* ONLY INCLUDED IN MANUFACTURING PRINT SET.

UNIT VARIATIONS

VAR	TITLE	PRINT SET Ø-1-2-3-4
	CONFIGURATION #1	
11Ø5-HA	KD11 B MM11 K 115V/6ØHZ	X
11Ø5-HB	KD11-B MM11-K,23ØV/5ØHZ	X
11Ø5-JA	KD11-B MM11 L 115V/6ØHZ	X
11Ø5-JB	KD11-B MM11-L 23ØV/5ØHZ	X
	CONFIGURATION #2	
11Ø5-KA	KD11-B MM11 K 115B/6ØHZ	X
11Ø5-KB	KD11-B MM11 K 23ØV/5ØHZ	X
11Ø5-LA	KD11-B MM11 L 115V/6ØHZ	X
11Ø5-LB	KD11 B,MM11-L,23ØV/5ØHZ	X
	CONFIGURATION #3	
11Ø5-MA	KD11-B MM11-K 115V/6ØHZ	X
11Ø5-MB	KD11-B MM11-K 23ØV/5ØHZ	X
11Ø5-PA	KD11-B MM11-L 115V/6ØHZ	X
11Ø5-PB	KD11-B MM11-L 23ØV/5ØHZ	X
	CONFIGURATION #4	
11Ø5-NC	KD11-B,MM11-L 115V/6ØHZ	X
11Ø5-ND	KD11-B MM11-L 23ØV/5ØHZ	X
11Ø5-FA	11Ø5-KA, UC15 FRONT PANEL (KY11-JF) 115V	
11Ø5-FB	11Ø5-KB,UC15 FRONT PANEL (KY11-JF) 23ØV	
11Ø5-FE	11Ø5-LA UC15 FRONT PANEL (KY11 JF) 115V	
11Ø5-FF	11Ø5-LB UC15 FRONT PANEL (KY11-JF) 23ØV	

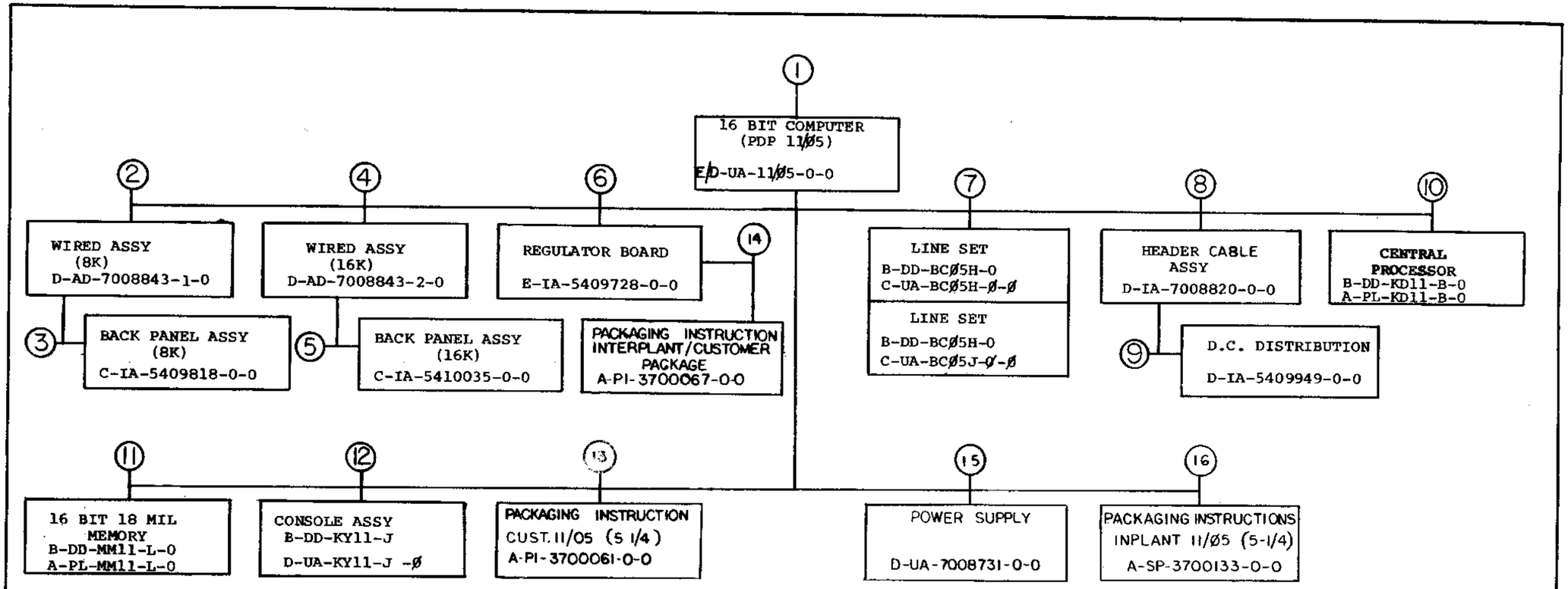
REVISIONS		
DATE	CHG. NO.	REV
7-76	11/05-62	AH
	REVISED&RETYPED	

EN-01062-1A-16-R972-1325

DRB 106

USED ON OPTION/MODEL	
SHEET 1 OF 8	

DRN. J. CAHILL	DATE	TITLE: 16 BIT COMPUTER (PDP 11Ø5)
CHK'D. C. TESCHNER	DATE	
PROJ ENG. B. WEEKS	DATE	
PROD. R. PETERSON	DATE	SIZE B / CODE DD / NUMBER 11Ø5-Ø / REV AH
FIELD SERV. D. DICKHUT	DATE	DIST



NOTE: This sheet for 5¼" only. See sheets 7 & 8 for 10½" chassis

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	SHEET 2 OF 8	B	DD	11Ø5-Ø	A

DRB 107

DEC 16-(325)-1062-2-N871

CUSTOMER PRINT SET 11Ø5-Ø	SET MFG.	FIND NO.	ELECTRICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X	X	1	E-IA-7008713-Ø-Ø	#	1	AC INPUT HARNESS	
X	X		E-IA-7008856-Ø-Ø	#	1	HARNESS (D.C.)	
X	X		A-AL-11Ø5-Ø-Ø4	A	1	11Ø5 ACCESSORY LIST	
X	X		A-SL-11Ø5-Ø-Ø5	*	1	11Ø5 SOFTWARE LIST	
X	X		D-MU-11Ø5-Ø-Ø1	*	1	MODULE UTILIZATION (8K)	
X	X		D-MU-11Ø5-Ø-Ø2	*	1	MODULE UTILIZATION (16K)	
	X		A-SP-11Ø5-Ø-6		23	11Ø5 ACCEPTANCE PROCEDURE	
X	X		D-IA-7008360-0-0	#	1	CABLE ASSY (KL8E)	
X	X		D-BS-KM11-Ø-MB	#	3	MAINTENANCE BOARD	
X	X		A-SS-5509081-0-9	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM1)	
X	X		A-SS-5509081-0-10	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM2)	
X	X		D-CS-M930-0-1		1	BUS TERMINATOR	
		2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	
	X		K-WL-7008843-1-1	#	1	ETCH/WIRE LIST (8K)	
		3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
X	X		C-CS-5409818-0-1	#	2	CIRCUIT SCHEMATIC (8K)	
X			A-WT-7008843-0	#	1	A.W.T. REVISION STATUS	
		4	D-AD-7008843-2-Ø	#	1	WIRED ASSY (16K)	
	X		K-WL-7008843-2-1	#	1	ETCH/WIRE LIST (16K)	
		5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
X	X		C-CS-5410035-0-1	#	2	CIRCUIT SCHEMATIC (16K)	
		6	E-IA-5409728-Ø-Ø	#	1	REGULATOR BOARD	
			D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409728-0-6	#	1	MODULE E.C.O. HISTORY	

CUSTOMER PRINT SET 11Ø5-Ø	SET MFG	FIND NO.	ELECTRICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
C	C	7	B-DD-BCØ5H-0	#	3	LINE SET	
			C-UA-BCØ5H-0-0	#	1	LINE SET BCØ5H (115V)	
			C-UA-BCØ5J-0-0	#	1	LINE SET BCØ5J (230V)	
X	X	8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
X	X		C-CS-5409949-0-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409949-0-6	#	1	MODULE E.C.O. HISTORY	
C	C	10	B-DD-KD11-B	#	1	CENTRAL PROCESSOR	
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
C	C	11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
		12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) PL.	
/	X	15	D-UA-7008731-0-0	#	1	POWER SUPPLY (5-1/4 INCHES)	

CUSTOMER PRINT SET CODES	
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
	C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
	S = CONFIDENTIAL AUTHORIZED SIGNATURE REQ. ED

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	SHEET 3 OF 8	B	DD	11Ø5-Ø	A

DRB 108

DEC 16-(325)-1062-2B-R972

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
X	X	1	E/D-UA-11Ø5-Ø-Ø	Z	5	16 BIT (PDP 11Ø5) ASSY	
X	X		C-PL-11Ø5-Ø-Ø	Z	3	16 BIT (PDP 11Ø5) ASSY (P.L.)	
			E-IA-7409458-0-0	#	4	CHASSIS	
			D-IA-7409453-0-0	#	1	FAN MOUNTING PLATE	
			A-DC-5309413-0-0	#	1	SPECIAL DECAL (UL)	
			C-IA-7411235-0-0	#	1	FILLER STRIP ASSY	
			B-IA-7411167-0-0	#	1	RET CONN BLOCK REAR	
			B-IA-7411168-0-0	#	1	RET CONN BLICK FRONT	
			D-IA-7409459-0-0	#	1	BRKT CHASSIS SLIDE (L.H.)	
			D-IA-7409533-0-0	#	1	COVER SIDE	
			C-JA-7409460-0-0	#	1	COVER TOP	
			C-IA-7409449-0-0	#	1	BRKT CHASSIS SLIDE (R.H.)	
			C-MD-7409591-0-0	#	1	CLAMP	
			C-PS-1210698-0-0	#	1	GUIDE CARD CENTER	
			D-PS-1210931-0-0	#	1	BLOCK CABLE RETAINER	
			D-MD-7409432-0-0	#	1	PLATE LOWER RETAINER	
			C-MD-7409430-0-0	#	1	NUT SWIVEL	
			C-MD-7409479-0-0	#	1	PLATE PRESSURE	
			D-IA-7008856-0-0	#	1	HARNESS DC	
			E-IA-7008713-0-0	#	1	AC INPUT HARNESS	
			A-AL-11Ø5-Ø-Ø4	#	1	11Ø5 ACCESSORY LIST	
			A-SL-11Ø5-Ø-Ø5	#	1	11Ø5 SOFTWARE LIST	
			B-MD-7409817-0-0	#	1	PLATE CABLE CLAMP	
			B-MD-7409816-0-0	#	1	SHIPPING BRACKET	
			C-MD-7409818-0-0	#	1	BRACKET CABLE CLAMP	
			B-IA-7409729-0-0	#	1	JUMPER POWER	
			D-PS-1210945-0-0	#	4	SLIDES	
			B-IA-7409903-0-0	#	1	JUMPER POWER	
			D-IA-7409533-1-0	#	1	COVER SIDE	
			E-IA-5309816-0-0	#	1	CHASSIS POWER SUPPLY	
			D-IA-7008726-0-0	#	1	TRANSFORMER ASSY	
			A-DC-5309414-0-0	#	1	SPECIAL DECAL (UL)	
			D-PS-1211381-0-0	#	1	AIR BAFFLE	
		2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
		3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
			D-AH-5409818-0-5	#	1	ASSY/DRILLING HOLE	
			K-CO-5409818-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
			C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
			E-PS-1211439-0-0	#	1	11Ø5 LOGIC FRAME	
			E-PS-1211425-0-0	#	1	72 PIN CONN BLOCK	
		4	D-AD-7008843-2-0	#	1	WIRED ASSY (16K)	
			D-MD-5010051-0-0	#	1	SHEET PROTECTION	
		5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
			E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
			D-AH-5410035-0-5	#	1	ASSY/DRILLING HOLE	
			K-CO-5410035-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
			E-PS-1211439-0-0	#	1	11Ø5 LOGIC FRAME	
			E-PS-1211425-0-0	#	1	72 PIN CONN BLOCK	
		6	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
			K-CO-5409728-0-4	#	1	X-Y CO-ORDINATE HOLE LAYOUT	
			C-MD-5309779-0-0	#	1	CONTACT COMMON CAPACITOR	
			C-MD-5309781-0-0	#	1	CONTACT CAPACITOR	
			C-IA-5310126-0-0	#	1	HOLDER CAPACITOR	
			D-PS-1210596-0-0	#	1	HEAT SINK	
		7	B-DD-BCØ5H-0	#	3	LINE SET	
			C-UA-BCØ5H-Ø-Ø	#	1	LINE SET BCØ5H (115)	
			C-UA-BCØ5J-Ø-Ø	#	1	LINE SET BCØ5J (230)	

CUSTOMER PRINT SET CODES

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TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	4 OF 8	B	DD	11Ø5-Ø	A H

DRB 108

MECHANICAL

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
			K-CO-5409949-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			D-AH-5409949-0-5	#	1	ASSY/DRILLING HOLE LAYOUT	
		10	B-DD-KD11-B	#	1	CENTRAL PROCESSOR	
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
		11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
C	C	12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) P.L.	
	X	13	A-PI-3700061-0-0	#	4	11/05 PACKAGING INSTRUCTION CUSTOMER 5¼	
			A-PS-9905647-0-0			FULL TELESCOPE CAP	
			A-PS-9905648-0-0			FOAM PAD	
			A-PS-9905646-0-0			LAMINATED BUILDUP	
			A-PS-9905734-0-0			PLASTIC STRAPPING	

MECHANICAL

CUSTOMER PRINT SET 11Ø5-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
	X	14	A-PI-3700065-0-0	#	2	REGULATOR BOARD PKG. INST.	
			A-PS-9905201-0-0		1	REGULAR SLOTTED CARTON	
			A-PS-9905202-0-0		1	TAPED TUBE	
			A-PS-9905203-0-0		2	RAT TRAP	
			A-PS-9905374-0-0		3	TAPE TUBE	
			A-PS-9905375-0-0		3	DIECUT CARTON	
	X	16	A-SP-3700133-0-0		3	PKG. INST. INPLANT 11/05 5¼	
			A-PS-9905271-0-0			LAMINATED BUILDUP	
			A-PS-9905184-0-0			LAMINATED BUILDUP	
			A-PS-9905418-0-0			REGULAR SLOTTED CARTON	
			A-PS-9905129-0-0			POLY BAG	
			A-PS-9905729-0-0			CARTON SEALING TAPE	

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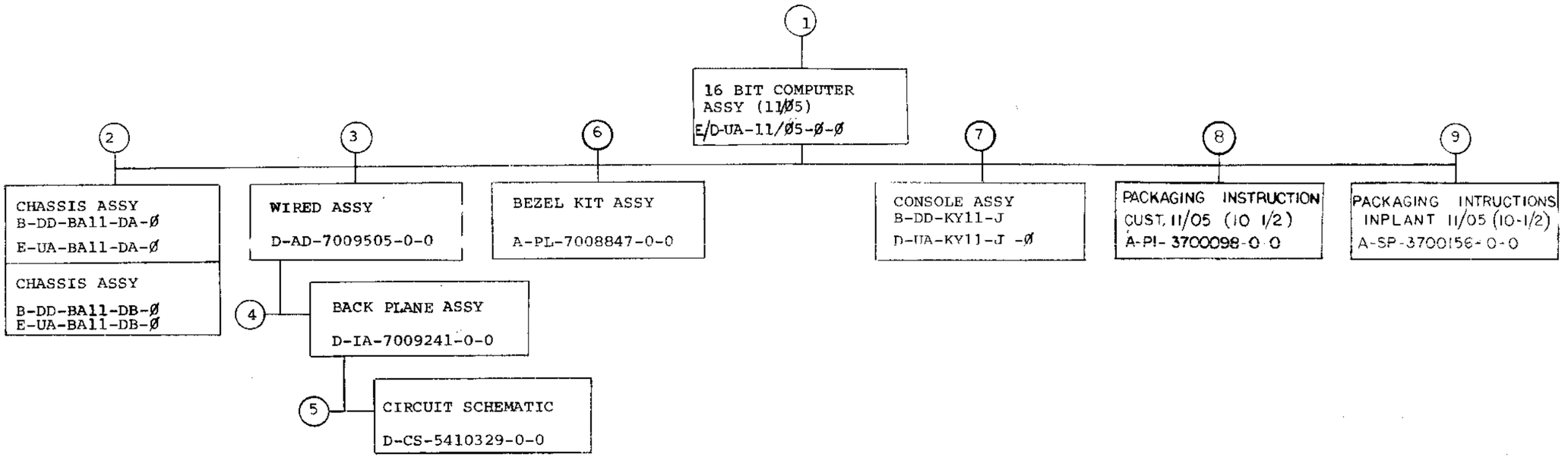
TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT COMPUTER	5 OF 8	B	DD	11Ø5-Ø	AH

DPB 108



NOTE: SHEETS 6 & 8 ARE FOR 10.5 BOX ONLY.

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP11Ø5)	SHEET 6 OF 8	B	DO	11Ø5-Ø	A.H

DRB 107
DEC 16—(325)—1062—3—N871

ELECTRICAL

CUSTOMER PRINT SET 11/05-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	E/D-UA-11/Ø5-Ø-Ø		5	16 BIT COMPUTER ASSY (11/Ø5)	
X	X		D-IA-7009360-0-0		1	CPU POWER HARNESS	
X	X		D-MU-11Ø5-Ø-Ø7		1	MODULE UTILIZATION (10.5)	
X	X		C-CS-M9970-0-1	#	1	BERG TO BACK PLANE	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		3	D-AD-7009505-0-0		1	WIRED ASSY	
			C-PS-1210698-0-0		1	CARD GUIDE	
	X		K-WL-1105-0-8	B	1	ETCH/WIRE LIST (10½)	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
			E-PS-1211425-0-0		1	72 PIN CONN BLOCK	
			E-PS-1211439-0-0		1	11/05 LOGIC FRAME	
			E-PS-1210258-0-0		1	288 PIN CONN BLOCK	
X	X	5	D-CS-5410329-0-1	#	1	CIRCUIT SCHEMATIC (1105 10.5)	
			K-CO-5410329-0-4		1	X-Y COORDINATE HOLE LOCATION	
			E-AH-5410329-0-5		1	ASSY/DRILLING HOLE LAYOUT	
			B-MH-5410329-0-6		1	MODULE ECO HISTORY	
			5010328		1	ETCH CIRCUIT BOARD	

MECHANICAL

CUSTOMER PRINT SET 11/05-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	E/D-UA-11/Ø5-Ø-Ø		6	16 BIT COMPUTER ASSY (11/Ø5)	
			D-IA-7009360-0-0		1	CPU POWER HARNESS	
			D-MD-7410664-0-0		1	CONSOLE MTG BRKT (10.5)	
			B-IA-7409729-0-0		1	JUMPER POWER	
C	C		B-DD-H75Ø-Ø	#		H75Ø POWER SUPPLY	
C	C		B-DD-BC05T-0	#		LINE SET BC05-T	
C	C		B-DD-BC05U-0	#		LINE SET BC05-U	
X	X		E-IA-7009208-0-0	#	1	DISTRIBUTION BOARD HARNESS (BA11-D)	
	X		A-DC-7411305-0-0	#		DECAL (10.5" MODULE UTILIZATION)	
			A-DC-7409478-0-0		1	DECAL, PATENT	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
		5	D-CS-5410329-Ø-1		1	CIRCUIT SCHEMATIC (1105 10.5)	
		6	A-PL-7008847-0-0		1	BEZEL KIT ASSY	
			D-IA-7409683-0-0		1	BEZEL	
			A-PS-1211221-0-0		1	STRIP MTG	
		7	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP11Ø5) PL	

CUSTOMER PRINT SET CODES

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S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP11Ø5)	SHEET 7 OF 8	B	DD	11Ø5-Ø	A H

DRB 108

DEC 16-(325)-1062-28-R972

MECHANICAL

CUSTOMER PRINT SET	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
	X	8	A-SP-3700098-0-0		4	PKG. INST. CUSTOMER 11/05 (10-1/2)	
			A-PS-9905647-0-0			FULL TELESCOPE CAP	
			A-PS-9905648-0-0			FOAM PAD	
			A-PS-9905641-0-0			LAMINATED BUILDUP	
			A-PS-9905734-0-0			PLASTIC STRAPPING	
	X	9	A-SP-3700156-0-0		3	PKG. INST. INPLANT 11/Ø5 (10⅓)	
			A-PS-9905417-0-0			REGULAR SLOTTED CARTON	
			A-PS-9905335-0-0			LAMINATED BUILDUP	
			A-PS-9905333-0-0			LAMINATED BUILDUP	
			A-PS-9905332-0-0			LAMINATED BUILDUP	
			A-PS-9905129-0-0			POLY BAG	
			A-PS-9905729-0-0			CARTON SEALING TAPE	

CUSTOMER PRINT SET	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO / FILE DATE

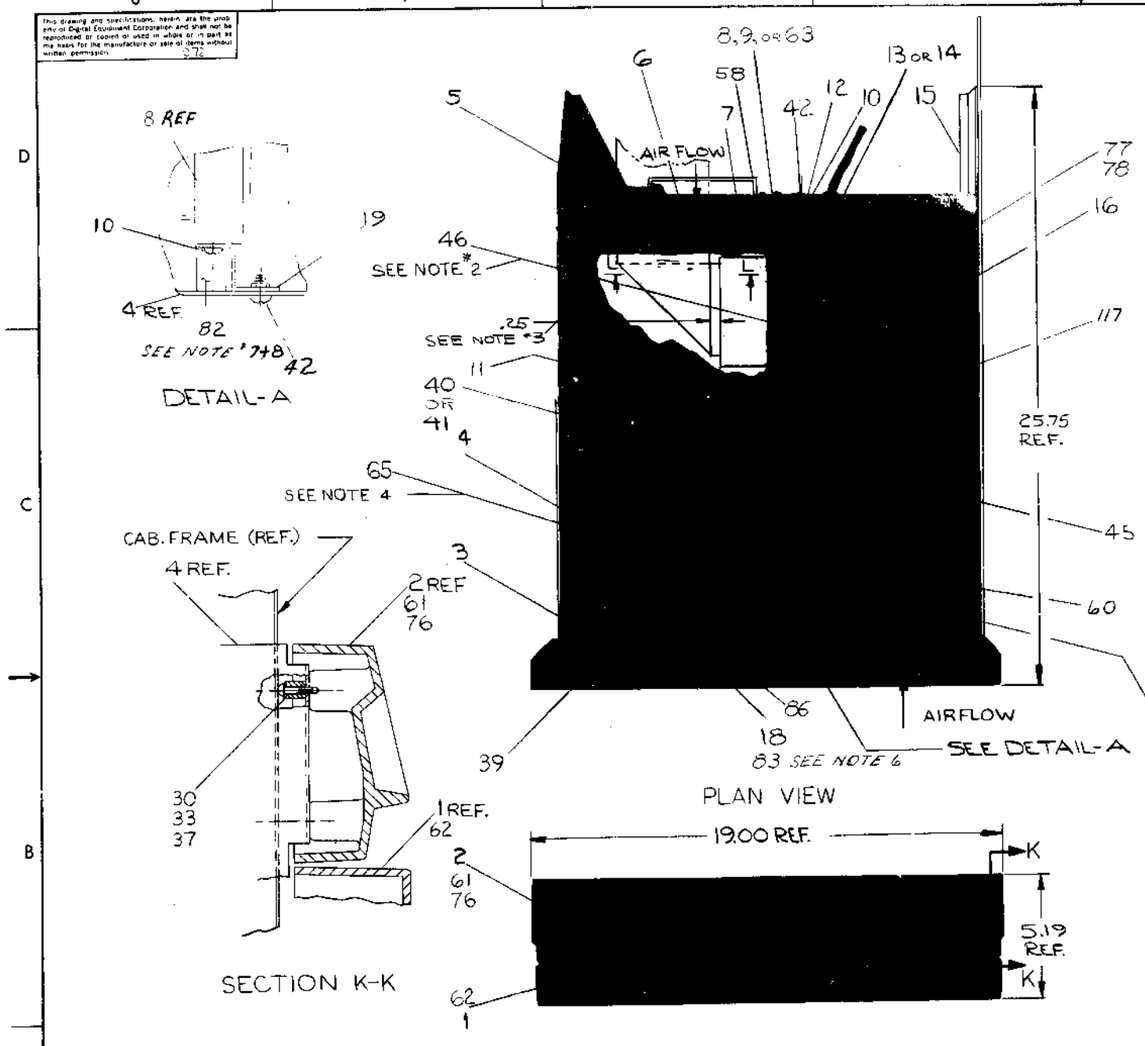
CUSTOMER PRINT SET CODES

X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGN/ IRE REQUIRED

TITLE: 16 BIT COMPUTER (PDP11Ø5)

SHEET 8 OF 8 | SIZE: B | CODE: DD | NUMBER: 11/Ø5-Ø | REV: A H

DRB 108



WIRE TABLE

PART NO.	COLOR	FROM HARNESS LEAD NO.	TO SYSTEM LOCATION	REMARKS
7008713	RED	J1	51-2	VIEW E-E
	RED	J2	51-1	
	VIO	J3	51-6	
	BLK	J4	51-5	
	RED	J12	H748 P.S. J3	THERMAL INTERLOCK
	RED	J11	H748 FAN	P.S. FAN TAB
	WHT	J10	H748 FAN	P.S. FAN TAB
		J6	P9	BACK OF CHASSIS
		J5	P8	BACK OF CHASSIS
		J9	TRANSFORMER P5	VIEW H-H
		P1	A.C. INPUT BOX J13	A.C. INPUT BOX
	RED	J7	11/05 FAN	CHASSIS FAN
7008713	WHT	J8	11/05 FAN	CHASSIS FAN
7008856		P1	H748 P.S. J2	P.S. MATE-N-LOCK
	VIO	8	BP-1	VIEW F-F
	RED	9	BP-3	
	YEL	10	BP-2	
	BLK	11	BP-4	
	BLU	12	BP-5	
	ORN	13	LOGIC POINT SCALL	+15
	BRN	14	LOGIC POINT SCALL P1	C+C -10
	BLK	15	BP-6	VIEW F-F
7008856	RED	16	BP-7	
		TRANSFORMER P2	7008731 P/S J1	VIEW H-H & POWER CARD TO TRANSFORMER
7409729-2	RED	B.P.-7	CONSOLE-+5	CONSOLE TO BACK PLANE & VIEW D-D
7409729-1	BLK	B.P.-6	CONSOLE-GND	CONSOLE TO BACK PLANE & VIEW D-D
7409903	BLK	B.P.-6	BACK PLANE-GND	BACK PLANE TO CHASSIS - DETAIL-A

THIS CONNECTION IS SHOWN 90° OUT OF POSITION FOR CLARITY.

NOTES:

1. INSTALLATION OF I/Ø CABLE, WHICH IS ALREADY CONNECTED TO ITEM *(2), CONSOLE ASSY, IS AS FOLLOWS.
   RUN I/Ø CABLE DOWN INNER SIDE OF ITEM *(18) CARD GUIDE ASSY SLIDE CABLE THROUGH OPENINGS ON BOTTOM OF ITEM *(18) CARD GUIDE ASSY, TO ONE OF THE THREE EXIT LOCATIONS FOR THE CABLE. AFTER EXIT LOCATION IS DECIDED, FOLD CABLE 90° AND HOLD IN PLACE BY USING ITEM * 35 (CLAMP) AND ITEM *46 (TAPE) AS SHOWN IN VIEW C-C.
2. USE TAPE (ITEM *46) TO HOLD HEADER CABLE ASSY TO CHASSIS.
3. FOLD CABLE 90° AS SHOWN TO INSURE CORRECT LOCATION IN CABLE CLAMP.
4. ITEM *65 (ELECTROMAGNETIC SHIELD) GOES BETWEEN CENTRAL PROCESSOR BOARDS & MEMORY BOARDS.
5. ITEMS *79 & 80 (THREAD CUTTING SCREWS) MUST BE ASSEMBLED USING A TORQUE SCREW DRIVER. SCREWS WILL BE ATTACHED USING 8 INCH POUNDS OF TORQUE.
6. ADHERE FOAM (9009542) TO TOP OF CARD GUIDE (*1211099).
7. ADHERE FOAM (9009543) TO END OF LOGIC FRAME.
8. DO NOT ADD ITEM *82 TO VARIATIONS MA, MB, PA, OR PB.
9. INSTALL BAFFLE (12113811) IN UNUSED SLOTS ON RIGHT HAND CARD GUIDE (1211099)

REVISIONS			
DIR	CHANGE NO.	REV	
2M	1105-00317	A	
LYONS			
2M	1105-00330	B	
M. TITELBAUM			10-5-72
2M	11/05-00334	C	
GRAHAM			10-27-72
2M	11/05-00035	D	
G. GRAHAM			12-8-72
2M	1105-00039	E	
R.L. GATES			1-8-73
2M	11/05-00040	F	
M. TITELBAUM			2-9-73
2M	11/05-00041	H	
G. GRAHAM			2-8-73
2M	11/05-00052	N	
G. GRAHAM			3-30-73
2M	11/05-00047	L	
ADDED SHEETS 5&6			
D. RANDALL			6-29-73
2M	11/05-00048	M	
GRAHAM			7-6-73
2M	11/05-00050	N	
G. GRAHAM			11-7-73
2M	11/05-00051	P	
G. GRAHAM			11-27-73
2M	1105-00052	R	
G. GRAHAM			12-14-73
2M	1105-00053	S	
G. GRAHAM			1-2-74
2M	1105-00055	T	
B. MINOR			3-21-74
2M	11/05-00056	U	
B. ARMSTRONG			4-24-74
2M	1105-00058	V	
MINOR			6-26-74
2M	11/05-00059	W	
ARMSTRONG			12-9-74
2M	11/05-00060	Y	
B. MINOR			2-26-75
2M	11/05-00062	Z	
S. MINOR			2-26-76

DEC FORM NO DRD 180-A

FIRST USED ON OPTION/MODEL	PDP1105		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES			
DECIMALS	ANGLES		
XXX ± .005	±0° 30'		
XX ± .02			
X ± .1			
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓			
MATERIAL			
FINISH			

QTY	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			

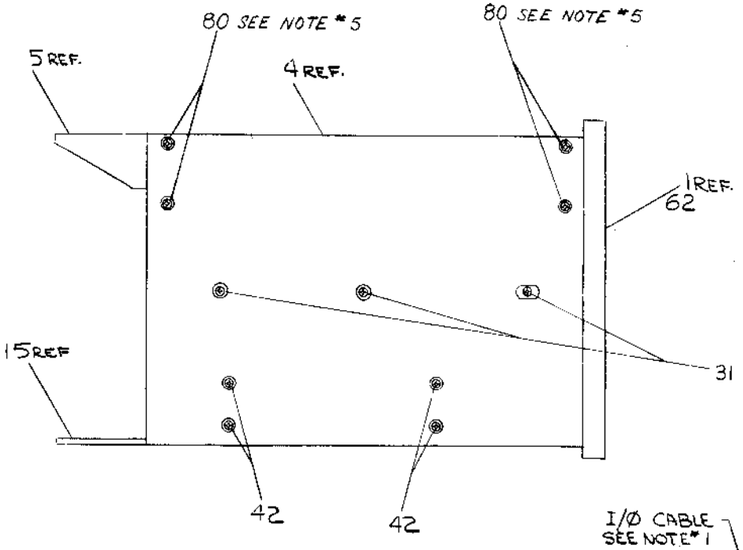
DRN		DATE 2-24-72
CHK'D J. Fischer		DATE 4-4-72
ENG Glen Lyons		DATE 5-15-72
PROJ. ENG. R.W. Hurley		DATE 5-16-72
PROD R.W. Peterson		DATE 5/24/72

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

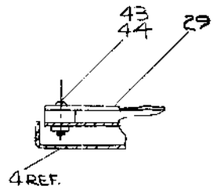
TITLE: 16 BIT COMPUTER ASSY (PDP 1105)

NEXT HIGHER ASSY.			
B-DD-1105-Ø			
SCALE NONE	SIZE CODE D	NUMBER 1105-Ø-Ø	REV. Z
SHEET 1 OF 5	DIST.		

DEC/CORP NUMBER 1105-Ø-Ø REV Z

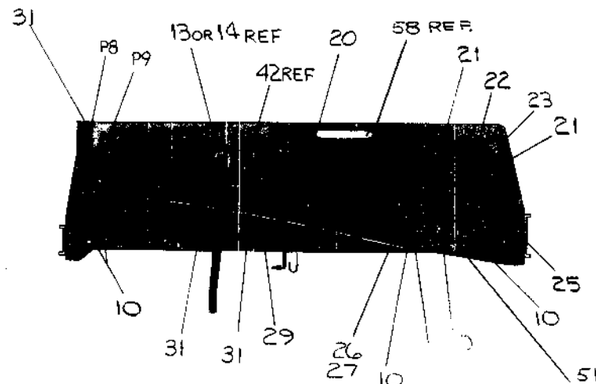


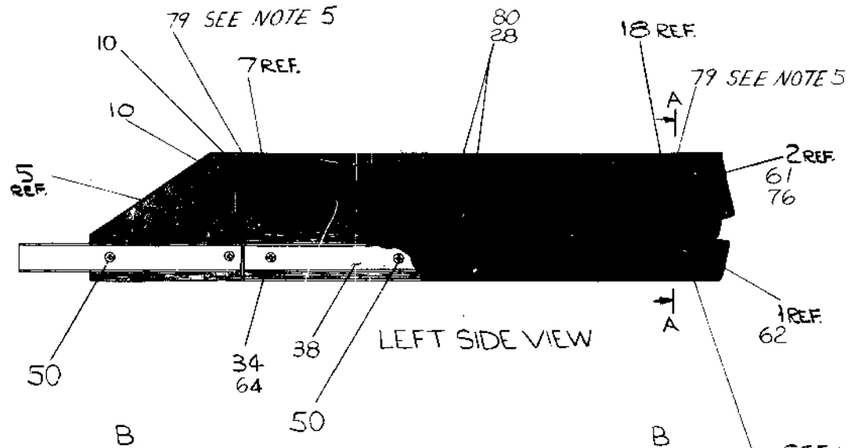
VIEW B-B

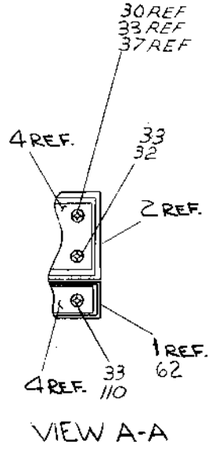


SECTION J-J

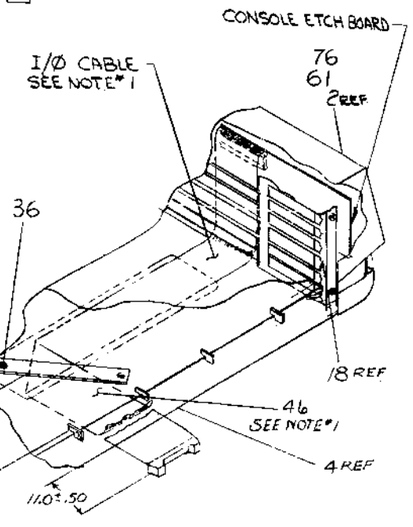
REAR VIEW







VIEW A-A



VIEW C-C

FIRST USED ON OPTION/MODEL: PDP 11Ø5	QTY.	DESCRIPTION	PART NO / ITEM NO
		PARTS LIST	

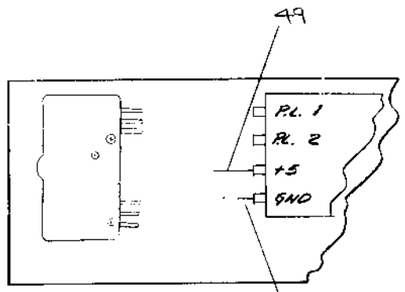
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN [signature] DATE 6-24-72
CHKD C. Teschner DATE 6-14-72
ENG Alan Lyons DATE 6-15-72
PROJ ENG [signature] DATE 6/16/72
PROD [signature] DATE 6/16/72
NEXT HIGHER ASSY: 6-DO-11Ø5-Ø

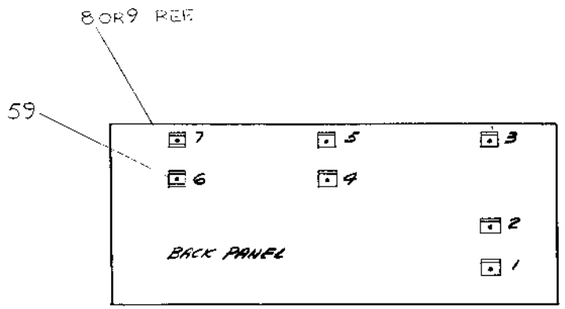
digital EQUIPMENT CORPORATION
TITLE: 16 BIT COMPUTER ASSY (PDP11Ø5)
SIZE D | CODE UA | NUMBER 11Ø5-Ø-Ø | REV. Z
SCALE NONE | SHEET 2 OF 5 | DIST

REVISIONS			
	REV.	CHANGE NO	CHK
	-		

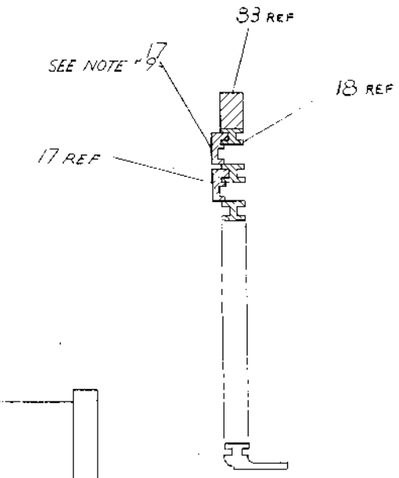
DEC FORM NO DRD 100-A



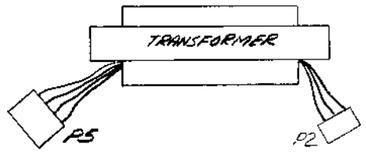
VIEW D-D
SCALE - NONE



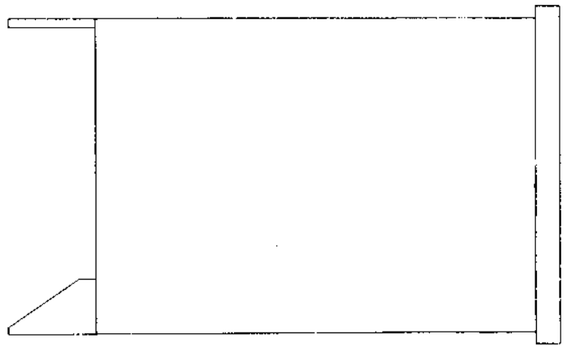
VIEW F-F
SCALE : NONE



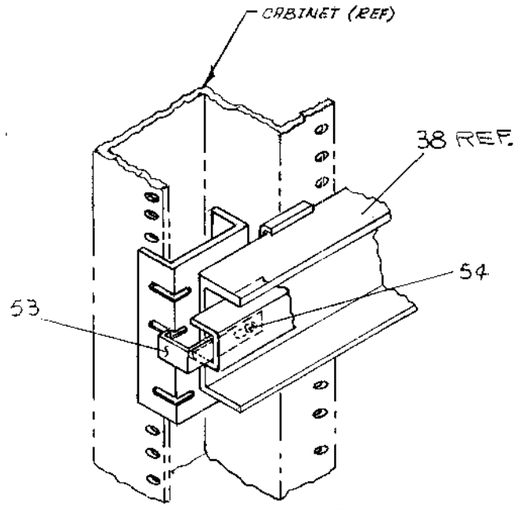
SECTION R-R



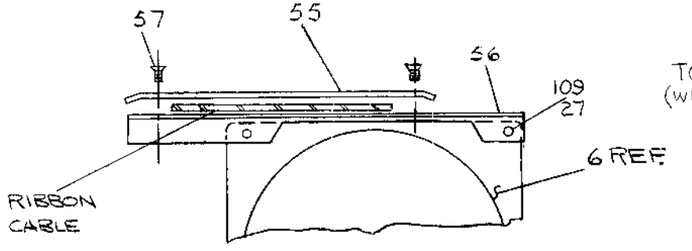
VIEW H-H
SCALE: NONE



TOP VIEW
(WITH TOP COVER)



LOCATION OF SHIPPING BRACKETS WHEN UNIT IS SUPPLIED IN CAB. (BOTH SIDES)



VIEW L-L
SCALE: NONE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO
PDP 11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1 — ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

DRN. [signature] DATE 3-28-72
CHK'D C. Fleschner DATE 4-14-72
ENG. Glenn Lewis DATE 5-15-72
PROJ. ENG'D [signature] DATE 5-8-72
PROD. DATE

MATERIAL —
FINISH —
NEXT HIGHER ASSY. B-00-1105-0
SCALE NONE
SHEET 3 OF 5

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE 16 BIT COMPUTER ASSY (PDP 11/05)

SIZE D | CODE UA | NUMBER 1105-0-0 | REV. Z | DIST

REVISIONS: REV | CHANGE NO | CHK

DO NOT SCALE DRAWING
DEC-11-D0-A

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	TO POINT	TO CONN.	SIGNAL NAME
85	—	—	—	P1	—	J1	
	22	ORN	9	—	—		LTC
	18	BLK	7	—	—	TB1-1	GND
	18	RED	8	—	—	TB1-2	+5V
	14	BLK	4	—	—	TB1-3	GND
	22	GRY	5	—	—	TB1-4	+15V
	18	BLU	6	—	—	TB1-5	-15V
	18	VIO	3	—	—	TB1-6	DCLO
	18	YEL	2	—	—	TB1-7	PCLO
83	18	RED	1	—	—	TB1-8	+5V

LEGEND

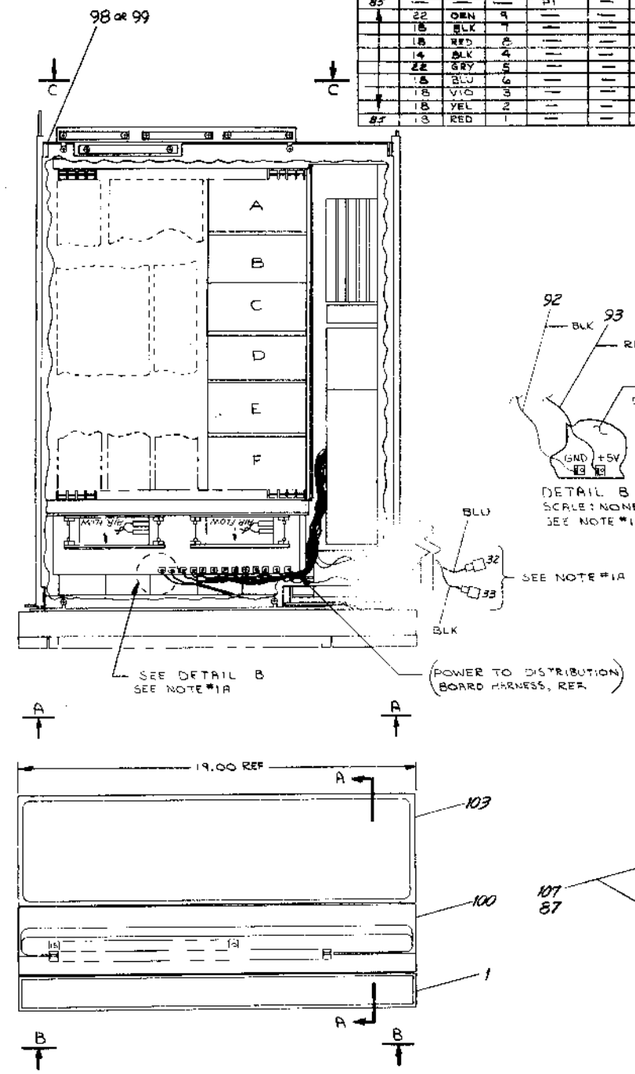
NUMBER	VARIATION
11/05 - NC	115V 60 HZ
11/05 - ND	230V 50 HZ

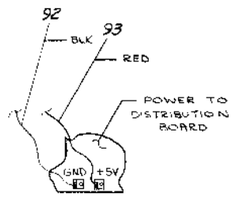
NOTES:

1A. POWER WIRING TO KY11-J CONSOLE (ITEM #3) IS AS FOLLOWS:
POINT NO'S. 32,33 (BLU/BLK TWP) OF POWER TO DISTRIBUTION BOARD HARNESS ARE TO BE CONNECTED TO KY11-J CONSOLE, AS SHOWN IN VIEW E-E.

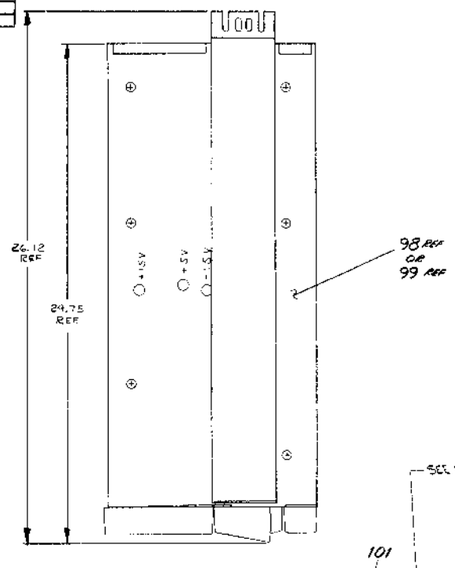
ITEM #92 (BLK WIRE) #93 (RED WIRE) TO BE CONNECTED AS SHOWN IN DETAIL-B
ITEM #93 (RED WIRE) GOING TO +5V AND ITEM #92 (BLK WIRE) GOING TO GND, THEN CONNECT LOOSE END OF ITEMS #92 & 93 TO KY11-J AS SHOWN IN VIEW D-D

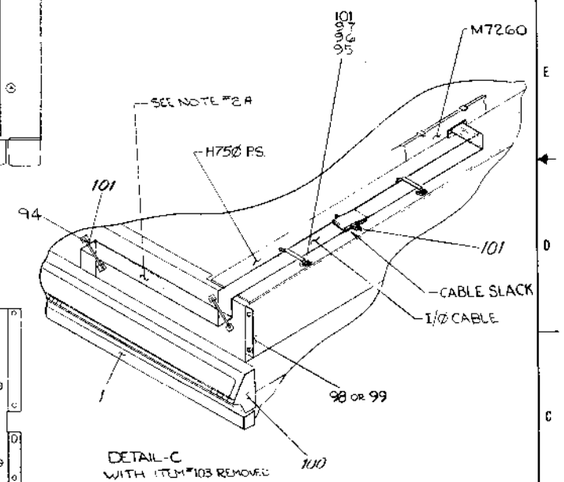
2A. INSTALLATION OF I/O CABLE, WHICH IS ALREADY CONNECTED TO CONSOLE ITEM NO 79, TO BE DRESSED TO FRONT PORTION OF CHASSIS AND ALONG POWER SUPPLY, THEN INTO CHASSIS WHERE CABLE IS CONNECTED TO M7260 BY USING 45° BENDS AND FASTENING WITH TIE WRAP HARDWARE. SEE DETAIL-C



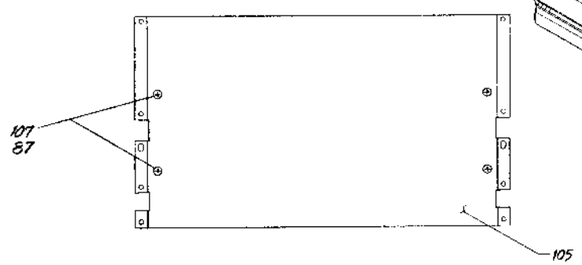


DETAIL B
SCALE: NONE
SEE NOTE #1A





DETAIL-C
WITH ITEM #103 REMOVED



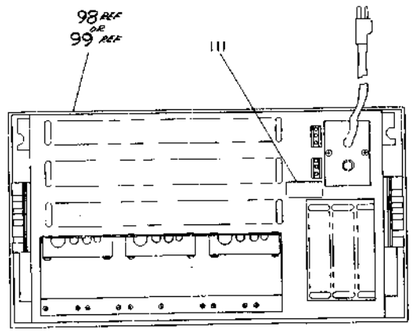
VIEW A-A
ITEM #100, 1 & 107 REMOVED FOR CLARITY OF VIEW

FIRST USED ON (PTK) MODEL: 11/05	QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED dimension in inches TOLERANCES: DECIMALS .X ± .030, .XX ± .01, .XXX ± .005; ANGLES ±0° 30'; REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY √	PARTS LIST			
MATERIAL	DRWN J. CAHILL 6-23-72	CHK T. FISCHER 6-26-72	ENGR A. LYONS 6-27-72	PROJ MGR J. WEEKS 7-10-72
FINISH	DES R. PETERSON 8-16-72	PROJECT NUMBER ABV: 8-DD-11Ø5-Ø-Ø	SCALE NONE	SHEET 1 OF 2

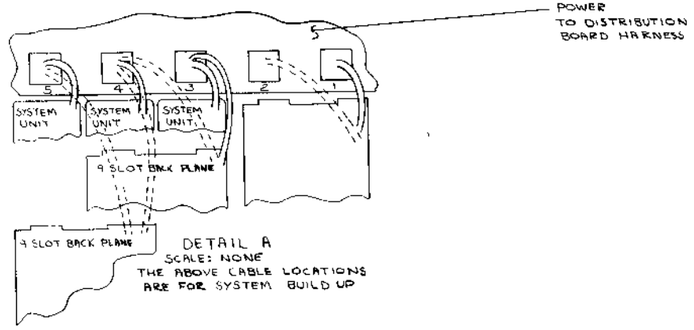
digital EQUIPMENT CORPORATION

TITLE: 16 BIT COMPUTER (PDP 11Ø5)

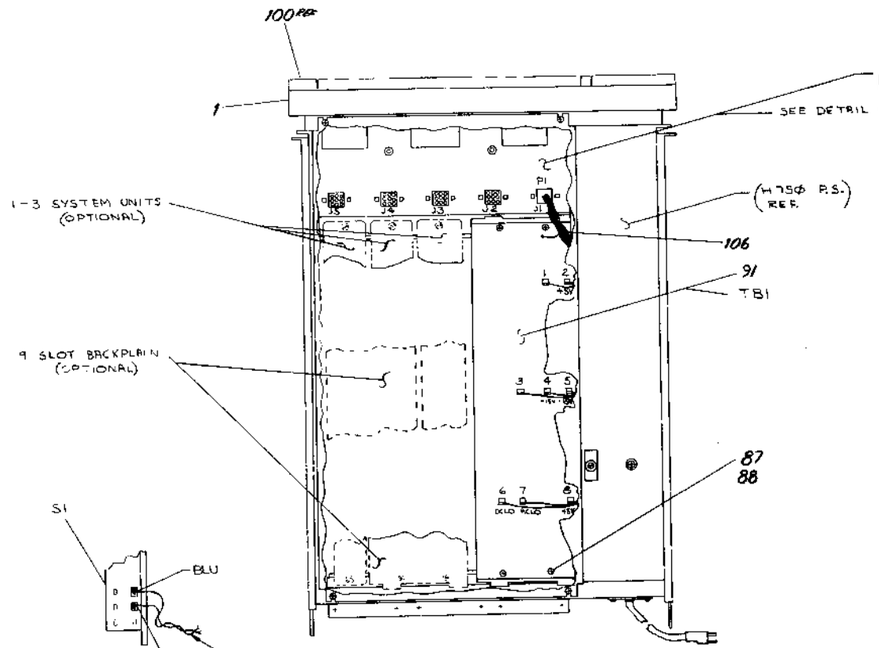
SYSTEM: F UA 11/05-0-0 | NUMBER | REV. | SIZE | DWG.

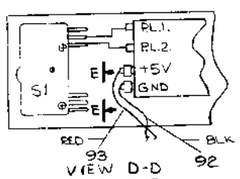


VIEW C-C

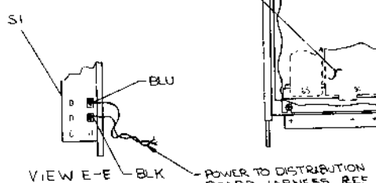


DETAIL A
SCALE: NONE
THE ABOVE CABLE LOCATIONS
ARE FOR SYSTEM BUILD UP



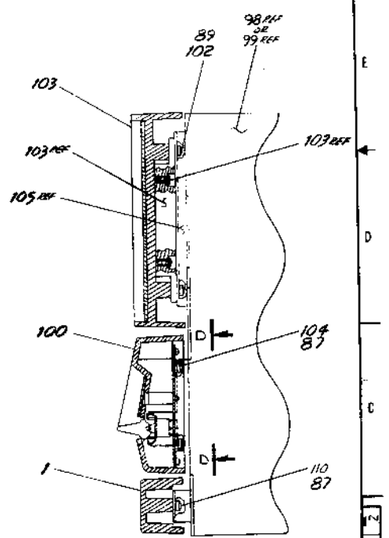


VIEW D-D
SCALE: NONE
SEE NOTE *1A



VIEW E-E
SCALE: NONE
SEE NOTE *1A

VIEW B-B



SECTION A-A
SCALE: NONE

FIRST USED ON	QTY	DESCRIPTION	PART NO	ITEM NO
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: XX ± .05, XXX ± .025
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS TO .010 MAX RADIUS
MATERIAL
FINISH

DRN	J CAHILL	6-04-73
CHK	T FISCHER	6-04-73
ENG	R LYONS	6-15-73
PROJ MGR	D MEEKS	6-15-73
QUAL	R PETERSON	6-15-73
NEXT HIGHER ASSY	B-00-11/05-0-0	
SCALE	NONE	
SHEET	2 OF 2	

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASS.

TITLE: 16 BIT COMPUTER (PDP 11/05)

SIZE	CODE	NUMBER	REV.
E	UA	11/05-0-0	Z

SHEET 1

B-11/05-0-0

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	QUANTITY / VARIATION																	
			11Ø5-FA	11Ø5-FB	11Ø5-FE	11Ø5-FF	11Ø5-HA	11Ø5-HB	11Ø5-JA	11Ø5-JB	11Ø5-KA	11Ø5-KB	11Ø5-LA	11Ø5-LB	11Ø5-MA	11Ø5-MB	11Ø5-PA	11Ø5-PB	11Ø5-NC	11Ø5-ND
1	D-PS-1211474-Ø-Ø	1.75 FILLER STRIP	1	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X		
2	D-UA-KY11-JA-Ø	CONSOLE ASSY	X	X	X	X	1	1	1	1	1	1	1	1	X	X	X	X	X	X
3	C-IA-7409460-Ø-Ø	COVER, TOP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
4	E-IA-7409458-Ø-Ø	CHASSIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
5	D-IA-7409459-Ø-Ø	BRACKET,CHASSIS SLIDE (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
6	1209403	FAN, SUPER BOXER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
7	E-PS-1211100-0-0	CARD GUIDE ASSY (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
8	D-AD-7008843-1-Ø	BACK PANEL ASSY (8K)	1	1	1	1	X	X	X	X	1	1	1	1	X	X	X	X	X	X
9	D-AD-7008843-2-Ø	BACK PANEL ASSY (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
10	9009191	SCR PHL HD PAN NYLOK *8-32 x 1/4 LG	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	X	X
~~11~~	~~D-IA-7008856-Ø-Ø~~	~~HARNESS (P.C.)~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
12	B-IA-7411167-0-0	RET. CONN. BLOCK (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
13	C-UA-BCØ5H-Ø-Ø	LINE SET BCØ5H (115V/60HZ)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
14	C-UA-BCØ5J-Ø-Ø	LINE SET BCØ5J (230V/50HZ)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
15	C-IA-7409449-Ø-Ø	BRACKET,CHASSIS SLIDE (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
~~16~~	~~E-IA-7008713-Ø-Ø~~	~~AC INPUT HARNESS~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
17	D-PS-1211381-Ø-Ø	AIR BAFFLE	3	3	3	3	3	3	3	3	3	3	3	3						
18	E-PS-1211099-Ø-Ø	CARD GUIDE ASSY REAR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
19	B-IA-7411168-Ø-Ø	RET. CONN. BLOCK FRONT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
20	D-IA-7409463-Ø-Ø	FAN MTG PLATE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
21	C-MD-7409479-Ø-Ø	PLATE, PRESSURE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
22	9006047-1	SCR PHL HD PAN *8-32 x 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
23	D-PS-1210931-Ø-Ø	BLOCK, CABLE RETAINING	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
24	C-MD-7409480-Ø-Ø	SWIVEL NUT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
25	D-MD-7409482-Ø-Ø	PLATE LOWER RETAINER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
26	9006024-1	SCR PHL HD PAN *6-32 x 1/2 (SEE NOTE #14 ON DWG D-UA-1105-0-0)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
27	9006560	KEP NUT 6-32	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
28	C-PS-1210698-Ø-Ø	GUIDE CARD CENTER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
29	C-IA-7008820-Ø-Ø	HEADER CABLE ASSY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
30	9006074-3	SCR PHL HD TRUSS #10-32 x 5/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
31	9009186	SCR PHL HD PAN NYLOC #6-32 x 5/16	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
32	9006071-3	SCR PHL HD TRUSS #10-32 x 3/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
33	9007651	WASHER EXT TOOTH #10	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
34	D-IA-7409533-Ø-Ø	COVER SIDE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
35	C-MD-7409591-Ø-Ø	CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
36	9009173	SCR BINDER HD NYLON #8-32 x 1/4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
37	9008074	SPACER 1/2" AF x 5/16-#10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
38	1210945	CHASSIS SLIDE	X	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	X	X
39	9008196	CLIP-ON RECPT.-SOUTHCO #82-47-104-15	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
40	D-MU-1105-Ø1-0	MODULE UTILIZATION (8K)	1	1	1	1	X	X	X	X	1	1	1	1	1	1	1	1	X	X
41	D-MU-1105-Ø2-0	MODULE UTILIZATION (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
42	9009192	SCR PHL HD PAN NYLOC #8-32 x 3/8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
43	9006005-1	SCR PHL HD PAN #2-56 x 1/2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X

REVISIONS	CHANGE NO.	CHK	REV.
REVISED & REDRAWN 1-24-72 S. Gladgese M. TITLEBAUM	11Ø5-00040		F
	11Ø5-00041		H
G. GRAHAM 2-8-73	11Ø5-00044		J
G GRAHAM 6-4-73	11Ø5-00046		K
GRAHAM 7-27-73	11Ø5-00047		L
D.RANDALL 8-30-73	11Ø5-00048		M
GRAHAM 9-6-73	11Ø5-00049		N
G. GRAHAM 11-7-73	11Ø5-00050		P
G. GRAHAM 11-27-73	11Ø5-00051		R

FIRST USED ON OPTION/MODEL
11/Ø5

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

		DATE
DRN.	J. CAHILL	2/25/2
CHK'D.	C. TESCHNER	5/2/2
ENG.	A. LYONS	5/15/2
PROJ. ENG.	B. WEEKS	5/16/2
PROD.	R. PETERSON	5/16/2

NEXT HIGHER ASSY.
D-UA-1105-0-0
SCALE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER.
ASSY (PDP 11Ø5)

SIZE	CODE	NUMBER	REV.
C	PL	11Ø5-0-0	Z

DIST.

DEC FORM NO. DRC 110

REV. Z
NUMBER 11Ø5-0-0
SIZE CODE C PL

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	1105-EA	1105-EB	1105-FA	1105-FB	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KB	1105-LA	1105-LB	1105-MA	1105-MB	1105-PA	1105-PB	1105-NC	1105-ND
44	9006631	WASHER INT TOOTH #2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
45	9008442	CABLE CLAMP (1/4)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
46	9009210-6	SCOTCH BRAND ADHESIVE TRANSFER TAPE	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
47																				
48	7409729-01	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
49	7409729-02	JUMPER POWER (RED)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
50	9009224	SCR SLOT PAN HD #8-32 x 1/4 LG	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	X	X
51	A-DC-5309900-0-0	POWER CONTROL DECAL (230V)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
52	A-DC-5309899-0-0	POWER CONTROL DECAL (115V)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
53	B-MD-7409816-0-0 *	SHIPPING BRACKET	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
54	9008143-1	SCR PHL HD PAN #8-32 X 1/4 THD CUTTING	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
55	B-MD-7409817-0-0	PLATE, CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
56	C-MD-7409818-0-0	BRACKET CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
57	9006011-2	SCR PHL HD FLAT #4-40 X 3/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
58	B-MD-7409828-0-0	BRACKET	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
59	9007694	QUIK DISCONNECT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
60	7409903	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
61	D-UA-KY11-JC-0	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
62	D-MD-7409978-0-0	BOTTOM TRIM	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
63	D-AD-7009119-0-0	BACK PANEL ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
	* USED ONLY WHEN INSTALLED IN CABINET																			
64	D-IA-7409533-1-0	COVER SIDE	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
65	1700021-0	ELECTROMAGNETIC SHIELD 1 OZ. CU	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	1	1
~~66~~	~~E-IA-5309816-0-0~~	~~CHASSIS~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
~~67~~	~~D-IA-7008726-0-0~~	~~TRANSFORMER MNC 415° -1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
~~68~~	~~9006024-1~~	~~SCR PHL PAN HD #6-32 X.50 LG~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~X~~	~~X~~
~~69~~	~~9006021-1~~	~~SCR PHL PAN HD #6-32 X.31LG~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~X~~	~~X~~
~~70~~	~~9006031-1~~	~~SCR PHL PAN HD #6-32 X1.25 LG~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~X~~	~~X~~
~~71~~	~~9006563~~	~~NUT KEPS #8-32~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~4~~	~~X~~	~~X~~
~~72~~	~~9006560~~	~~NUT KEPS #6-32~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~X~~	~~X~~
~~73~~	~~9007649~~	~~WASHER EXT. LOCK #6-32~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~X~~	~~X~~
74	9007035	GROMMET CATERPILLAR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
~~75~~	~~B-IA-5409728-0-0~~	~~REGULATOR BOARD~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
76	D-UA-KY11-JF-0	CONSOLE ASSY	1	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X
77	A-DC-5309413-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
78	A-DC-5309414-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
79	9008181-1	SCR ~~PHL. PAN~~ HD TYPE F 6-32 X .50LG	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
80	9009525-1	SCR, ~~PHL PAN~~ HD TYPE F 6-32 X .37LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
81	9009070	SCRPHL FLAT HD SPECIAL 8-32X.81LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
82	9009543	FOAM 3/8 X 1 X3 3/4LG	1	1	1	1	1	1	1	1	1	1	1	1	-		-	-	X	X
83	9009542	FOAM ½ X 5/16 X7 9/16LG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
~~84~~	~~9009544~~	~~FOAM ½ x ¼ x 16 ¼LG~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
~~85~~	~~9008048~~	~~FIBER WASHER 3/32ID X ½ OD X 3/32~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~6~~	~~X~~	~~X~~
86	A-DC-7411255-0-0	LABEL (REMOVE FOAM)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X

REVISIONS

REV.	CHANGE NO.			
R	11/05-C0052	12-10-73	G. GRAHAM	1-2-74
S	11/05-00054	2-22-74	GRAHAM	3-7-74
T	11/05-00055	3-20-74	B. MINOR	3-29-74
U	11/05-00056	4-16-74	B. ARMSTRONG	4-24-74
V	11/05-00058	8-16-74	MINOR	8-22-74
W	11/05-00059	12-4-74	B. ARMSTRONG	12-9-74
X	11/05-00060	3-17-75	B. MINOR	3/20/75
	11/05-00062	8-Jul-76	B. MINOR	26-Aug-76

FIRST USED ON OPTION/MODEL
11/05

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

DRN. J. CAHILL	DATE 2/25/2
CHK'D. C. TESCHNER	DATE 5/2/2
ENG. A. LYONS	DATE 5/15/2
PROJ. ENG. B. WEEKS	DATE 5/16/2
PROD. R. PETERSON	DATE 5/16/2

NEXT HIGHER ASSY.
D-UA-1105-0-0
SCALE
SHEET 2 OF 3

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP 1105)

SIZE C CODE PL NUMBER 1105-0-0 REV. Z
DIST.

DEC FORM NO. DRC 110

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	1105-FA	1105-FB	1105-FE	1105-FF	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KH	1105-LA	1105-LB	1105-MA	1105-MB	1105-PA	1105-PB	1105-NC	1105-ND
87	9ØØ6635	WASH INT TOOTH #10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12	12
88	9ØØ6Ø43-1	SCR PHL HD PAN #8-32 x 1.0 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
89	9ØØ6Ø35-1	SCR PHL HD PAN #8-32 x .25 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
90	D-MU-1105-Ø-Ø7	MODULE UTILIZATION (16K)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
91	D-UA-7ØØ95Ø5-Ø-Ø	WIRED ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
92	B-IA-74Ø9729-Ø3	JUMPER POWER (BLK)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
93	B-IA-74Ø9729-Ø4	JUMPER POWER (RED)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
94	9ØØ9264	CLAMP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
95	9ØØ7Ø33	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
96	9ØØ7649	WASH EXT TOOTH #6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
97	9ØØ62Ø8-1	SCR PHL HD PAN #6-32 x .1/4 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
98	E-UA-BA11-DA-Ø	CHASSIS ASSY (115V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	X
99	E-UA-BA11-DB-Ø	CHASSIS ASSY (230V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
100	D-UA-KY11-JD-Ø	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
101	9ØØ8442	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8
102	9ØØ6634	WASHER INT TOOTH #8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8
103	A-PL-7ØØ8847-Ø-Ø	BEZEL KIT ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
104	9ØØ6Ø71-1	SCR PHL HD PAN #10-32 x .38 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	6	6
105	D-MD-7410664-Ø-Ø	CONSOLE MTG BRK'T (10.5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
106	D-IA-7ØØ936Ø-Ø-Ø	CPU POWER HARNESS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
107	9ØØ6Ø7Ø-1	SCR PHL HD PAN #10-32 x .31 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
108	A-DC-7411305-0-0	DECAL (10 1/2" MODULE UTILIZATION)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
109	9ØØ6Ø25-1	PHL PAN HD SCREW 6-32 X.62 (SEE NOTE #14 ON D-IA-1105-0-0)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
110	9009573	SCR PHL HD PAN THREAD CUTTING #10-16X3/8 LG	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
111	A-DC-7409478-0-0	DECAL PATENT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
112	A-PI-3700061-0-0	PACKAGING INSTRUCTION (5-1/4) CUST.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
113	A-PI-3700098-0-0	PACKAGING INSTRUCTION (10-1/2) CUST.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
114	~~9006633~~	~~#6 INT TOOTH L WASHER~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~X~~	~~X~~
115	9009165	CLIP MTG (SEE NOTE #14 ON DWG. D-UA-1105-0-0)	2	2	2	2	X	2	2	2	2	2	2	2	2	2	2	2	X	X
116	9008292	CLIP MTG (SEE NOTE #14 ON DWG. D-UA-1105-0-0)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
117	D-UA-7008731-0-0	POWER SUPPLY 11/05 (5-1/4 INCHES)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
118	A-SP-3700133-0-0	PACK. INST. 11/05 INPLANT (5-1/4)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
119	A-SP-3700156-0-0	PACK. INST. 11/05 INPLANT (10-1/2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1

REVISIONS

REV.	CHANGE NO.	CHK

FIRST USED ON SPITBALL/PDP 11Ø5

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

MATERIAL

FINISH

		DATE
DRN.	J.CAHILL	2/25/72
CHK'D.	C.TESCHNER	3/2/72
ENG.	A.TSONS	3/15/72
PROJ. ENG.	B.WEEKS	3/16/72
PROD.	R.PETERSON	3/16/72

NEXT HIGHER ASSY.
B-DD-11Ø5-Ø

SCALE

SHEET 3 OF 3

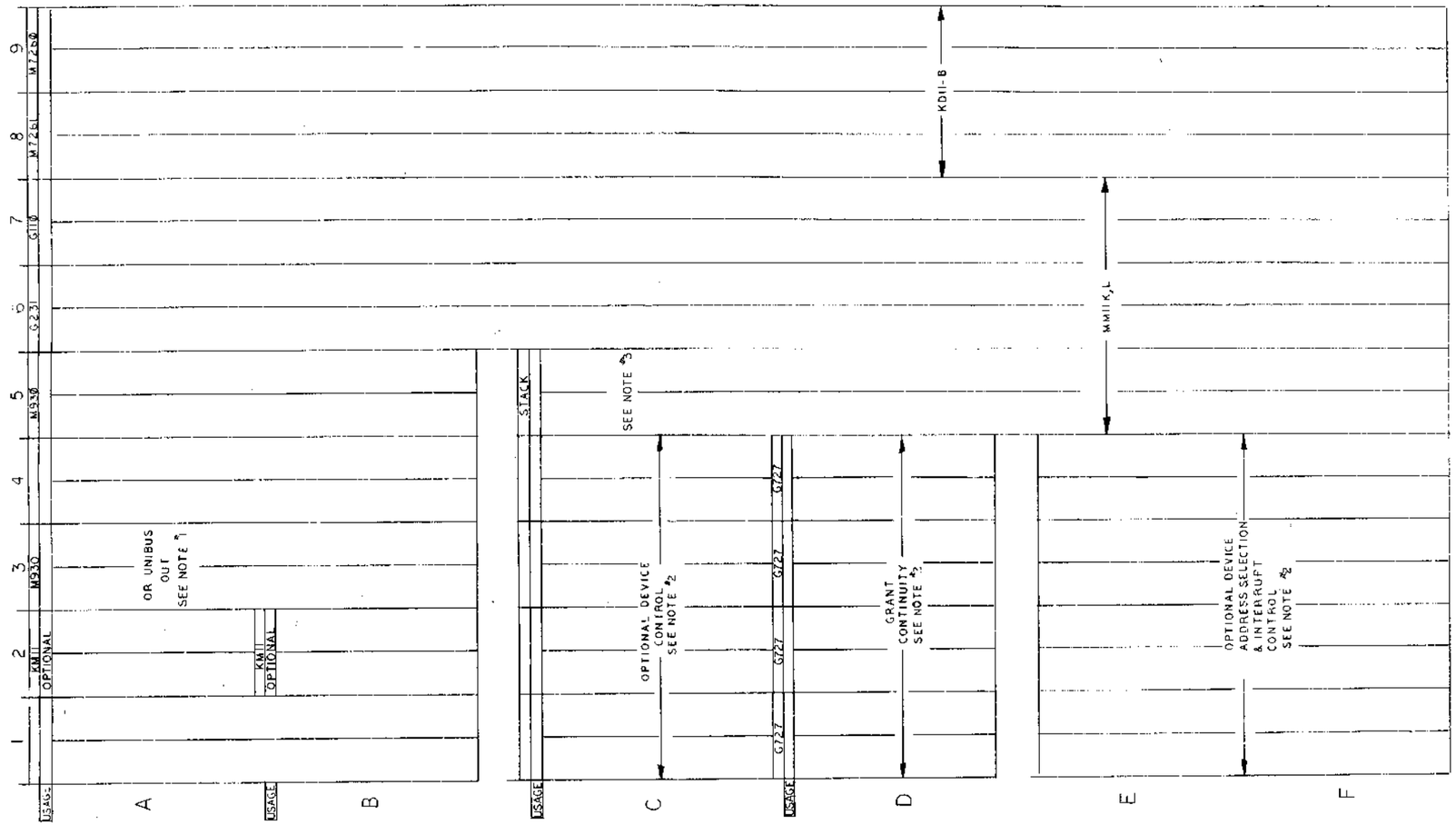
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP11Ø5)

SIZE	CODE	NUMBER	REV.
C	PL	11Ø5-Ø-Ø	Z

DIST.

DEC FORM NO. DRC 110



CONFIGURATION #2
(8 K)

NOTES:

1. BEFORE THE 1105 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M930 BUS TERMINATOR IS IN LOCATION A, B03. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION

2. PREWIRED MODULE SLOTS FOR SMALL PERIPHERAL OPTIONS. WITH NO OPTIONS INSTALLED, BUS GRANT CONTINUITY IS PROVIDED BY G727 MODULE IN LOCATION D01, D02, D03, D04. THE G727 IS REMOVED WHEN A SMALL PERIPHERAL OPTION IS INSTALLED

3. IF MM11K, STACK IS H213
   IF MM11L, STACK IS H214

ITEM NO.	PART NO.	DESCRIPTION	QTY.
5	B-DD-KD11-B-Ø	CENTRAL PROCESSOR	1
4	A-PL-G727-Ø-Ø	GRANT CONTINUITY	4
3	B-DD-MM11-L-Ø	16BIT 18 MIL MEMORY	1
2	A-PL-M930-Ø-Ø	BUS TERMINATOR	2
1	A-PL-KM11-Ø-Ø	MAINTENCE BOARDS	*

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. C. Tieschner DATE 4-24-72
CHK'D DATE
ENG. DATE 5-4-72
PROJ. ENG. DATE 5-9-72
PROD. DATE 5/8/72

NEXT HIGHER ASSY. D-UA-1105-Ø-Ø
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: MODULE UTILIZATION (8K)

SIZE D | CODE MU | NUMBER 1105-Ø-Ø2 | REV

DIST.

LAST ISSUE D MU 1105-Ø-Ø2

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM #D 11SED 1200-A

NOTES:

1. BEFORE THE 11Ø5 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M930 BUS TERMINATOR IS IN LOCATION A, BØ2. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION

2. PREWIRED MODULE SLOTS FOR SMALL PERIPHERAL OPTIONS. WITH NO OPTIONS INSTALLED, BUS GRANT CONTINUITY IS PROVIDED BY G727 MODULE IN LOCATION DØ1. THE G727 IS REMOVED WHEN A SMALL PERIPHERAL OPTION IS INSTALLED

3. IF MM11K, STACK IS H213
   IF MM11L, STACK IS H214

CONFIGURATION #1
(16K)

QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	CENTRAL PROCESSOR	B-DD-KD11-B-Ø	5
1	GRANT CONTINUITY	A-PL-G727-Ø-Ø	4
1	16BIT 18 MIL MEMORY	B-DD-MM11-L-Ø	3
2	BUS TERMINATOR	A-PL-M930-Ø-Ø	2
*	MAINTENCE BOARDS	A-PL-KM11-Ø-Ø	1

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-11Ø5

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX ± .005, .XX ± .02, .X ± .1
ANGLES ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. C. Teschner DATE 4-26-72
CHK. [illegible] DATE 5-4-72
ENG. [illegible] DATE 5-4-72
PROJ ENG. [illegible] DATE 5-4-72
PROD. [illegible] DATE 5/5/72
NEXT HIGHER ASSY. D-UA-11Ø5-Ø-Ø
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MODULE UTILIZATION (16K)

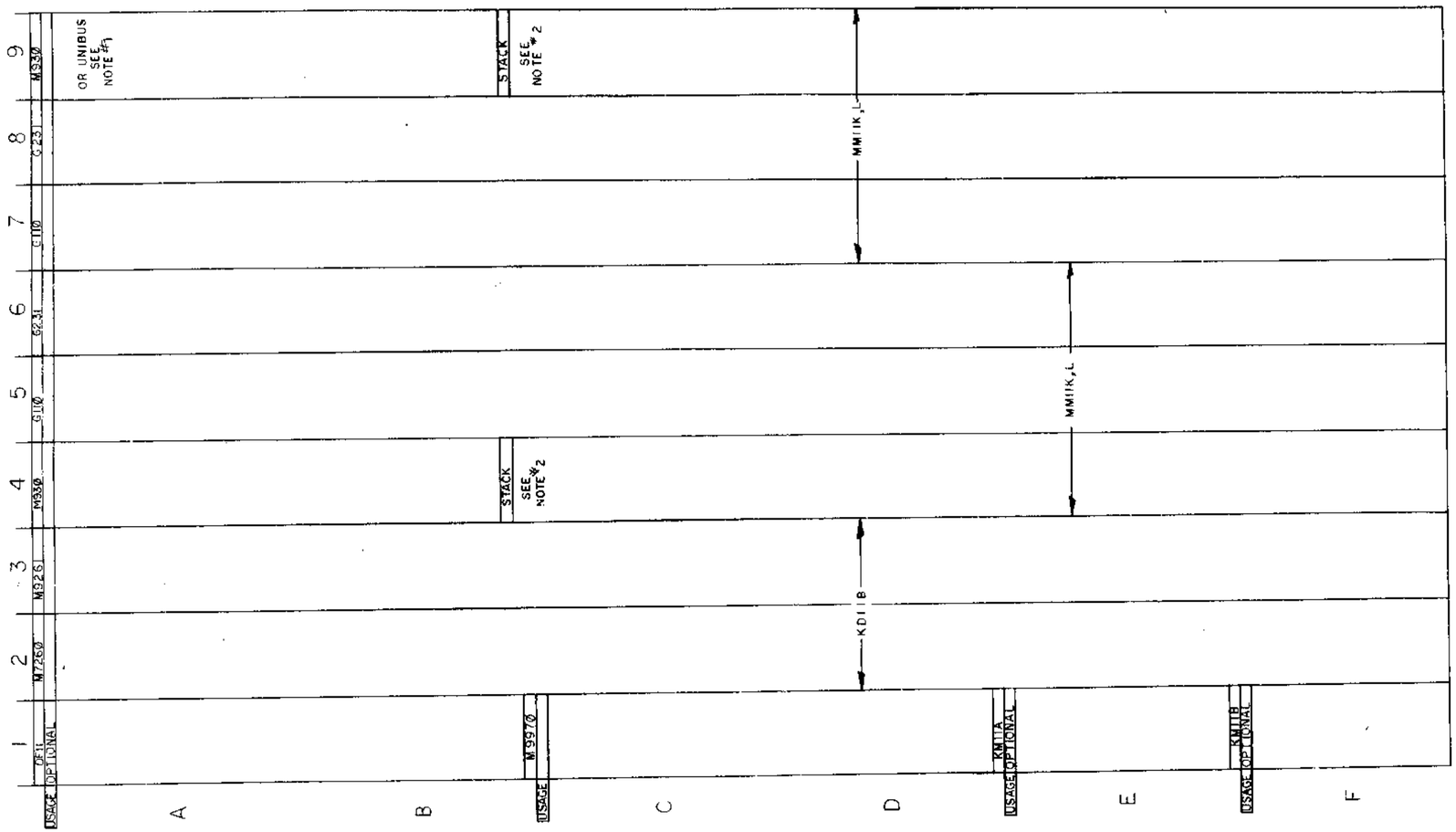
SIZE D | CODE DMU | NUMBER 11Ø5-Ø-Ø1 | REV.

DIST

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO DRD 100-A

11Ø5-Ø-Ø1



NOTES:
1. BEFORE THE 11Ø5 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M93Ø BUS TERMINATOR IS IN LOCATION A,BØ9. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION.
2. IF MM11-K, STACK IS HZ13; IF MM11-L, STACK IS HZ14.

ITEM NO.	PART NO.	DESCRIPTION	QTY.
5	D-CS-M9970-Ø-1	M9970	1
4	B-DD-KD11-B-Ø	CENTRAL PROCESSOR	1
3	B-DDMM11-L-Ø	16BIT 18MIL MEMORY	1
2	A-PL-M930-ØØ	BUS TERMINATOR	2
1	A-PL-KM11-Ø-Ø	MAINTENCE BOARDS	*

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-11Ø5

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, .XX ± .02, .X ± .1
ANGLES: ± 6° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓
MATERIAL
FINISH

	NAME	DATE
DRN	K. Davis	12-11-72
CHK'D		1-17-73
ENG		1-17-73
PROJ. ENG		1-17-73
APPD		1-21-73

NEXT HIGHER ASSY: D-UA-11Ø5-Ø-Ø
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MODULE UTILIZATION (16K)

SIZE/CODE D | NUMBER MU 11Ø5-Ø-Ø7 | REV.
DIST.

REV.	REVISIONS	CHANGE NO.	CHK

BRUNING AD 107 15969
DFC FORM NO (DFC) 109-A

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET [X]

SEQUENCE		SEQUENCE	
16 BIT PROCESSOR KD11-B	B-DD-KD11-B		
MICROPROGRAM FLOw	K-MP-KD11-B-1		
MICROPROGRAM SYMBOLIC LISTING	K-MP-KD11-B-2		
MICROPROGRAM BINARY LISTING	K-MP-KD11-B-3		
MICROPROGRAM CROSS REF. LISTING	K-MP-KD11-B-4		
DATA PATHS	E-CS-M726Ø-Ø-1		
DATA PATH ROM PATTERNS	K-RL-M726Ø-Ø-8		
CONTROL LOGIC & MICROPROGRAMS	E-CS-M7261-Ø-1		
CONTROL LOGIC ROM PATTERNS	K-RL-M7261-Ø-8		

UNIT VARIATIONS

VARIATION	TITLE	PRINT SET TYPE: KD11-B
KD11-B	16 BIT PROCESSOR	

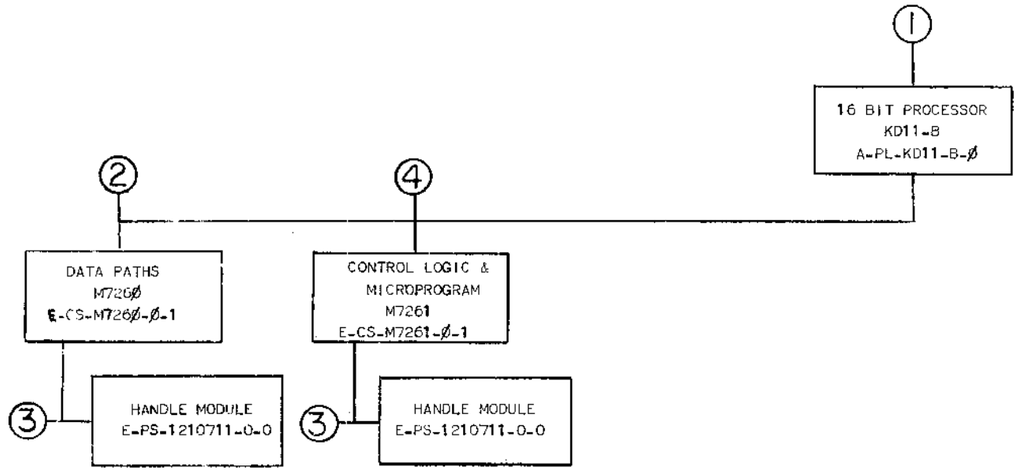
REVISIONS	REV	CHG. NO.	DATE
	A	KD11B-00002	
	B	KD11B-00003	MT
	C	KD11B-4	M.T.
	D	KD11B-5	D.R.
	E	KD11B-6	D.R.

USED ON OPTION/MODEL

DRN. J.CAHILL	DATE 4/21/72	TITLE: 16 BIT PROCESSOR KD11-B
CHK'D. C.Teschner	DATE 5-15-72	
PROJ.ENG. A. Tacha	DATE 5-16-72	
PROD.	DATE 5/15/72	SIZE B; CODE DD; NUMBER KD11-B; REV E
FIELD SERV. D. Beckett	DATE	
SHEET 1 OF 3		DIST

DRB 106

DEC 16-(325)-1062-1-N871



TITLE		SIZE	CODE	NUMBER	REV
16 BIT PROCESSOR KD11-B	SHEET 2 OF 3	B	DD	KD11-B	E

DRB 107
DEC 16-(325)-1062-3-N871

ELECTRICAL

CUSTOMER PRINT SET KDII-B	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1.	A-PL-KD11-B-Ø		1	16 BIT PROCESSOR (KD11-B)	
C			K-MP-KD11-B-1	C	22	MICOPROGRAM FLOW	
C			K-MP-KD11-B-2	E	6	MICROPROGRAM SYMBOLIC LISTING	
C			K-MP-KD11-B-3	E	7	MICROPROGRAM BINARY LISTING	
C			K-MP-KD11-B-4		3	MICROGROGRAM CROSS REF. LISTING	
X		2.	E-CS-M726Ø-Ø-1	#	10	DATA PATHS (M726Ø)	
			B-MH-M726Ø-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M726Ø-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M726Ø-Ø-5		1	ASSY/DRILLING HOLE	
X			K-RL-M726Ø-Ø-8	#	15	DATA PATH ROM PATTERNS	
X		4.	E-CS-M7261-Ø-1	#	13	CONTROL LOGIC & MICROPROGRAM	
			B-MH-M7261-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M7261-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M7261-Ø-5		1	ASSY/DRILLING HOLE	
X			K-RL-M7261-Ø-8	#	57	CONTROL LOGIC ROM PATTERNS	

MECHANICAL

CUSTOMER PRINT SET KDII-B	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1.	A-PL-KD11-B-Ø		1	16 BIT PROCESSOR (KD11-B)	
		2.	E-CS-M726Ø-Ø-1		10	DATA PATHS (M726Ø)	
			B-MH-M726Ø-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M726Ø-Ø-4		1	X-Y CO-ORDINATE HOLE HISTORY	
			B-AH-M726Ø-Ø-5		1	ASSY/DRILLING HOLE	
		3.	E-PS-1210711-0-0		1	HANDLE MODULE	
		4.	E-CS-M7261-Ø-1		13	CONTROL LOGIC & MICROPROGRAM	
			B-MH-M7261-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M7261-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M7261-Ø-5		1	ASSY/DRILLING HOLE	

TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT PROCESSOR KD11-B	3 OF 3	B	DD	KD11-B	E

DRB 108

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS			REMARKS
1	A	B	C	
2	A	A	A	
3	A	A	A	
4	A	A	A	
5	A	A	A	
6	A	A	B	
7	A	B	B	
8	A	A	A	
9	A	A	B	
10	A	A	B	
11	A	A	A	
12	A	A	B	
13	A	A	B	
14	A	A	A	
15	A	A	A	
16	A	A	A	
17	A	A	A	
18	A	A	A	
19	A	A	A	
20	A	A	A	
21	A	A	A	
22	A	A	A	
ECO NO.	KD112-2	KD112-3	KD112-6	
ETCH REV.				
ENG.	BA	MT	D.R.	
DATE	8-28-72	9-21-72	6-14-74	

FIRST USED ON OPTION/MODEL
KD11-B

DRN. G. TOWNE	DATE 8-21-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. J McCallum	DATE 8-21-72	
ENG. Bob Armstrong	DATE 8-29-72	TITLE MICROPROGRAM FLOW
PROJ. ENG. Bob Armstrong	DATE 8-29-72	
PROD.	DATE	

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 1 OF 22

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-1	C

DIST.

NOTES ON NOTATION:

1. MICROROUTINES BEGIN WITH A COMMENT THE FIRST CHARACTER OF WHICH IS '*'.

2. ALL OTHER COMMENTS BEGIN WITH '/'.

3. R[N] REFERRS SCRATCH PAD REGISTER N, R[7] IS ALSO REFERRED TO AS 'PC'.

4. R[S] REFERRS TO THAT REGISTER SPECIFIED IN THE SOURCE PORTION OF THE CURRENT INST, (IR<11:9>). LIKEWISE, R[D] REFERRS TO THAT REG SPECIFIED IN THE DESTINATION PORTION OF THE CURRENT INST, (IR<2:0>).

5. K[N] REFERRS TO THAT LOCATION OF THE CONSTANTS CHIP CONTAINING THE CONSTANT N.

6. 'BUT' STANDS FOR 'BRANCH ON MICRO TEST'.

```
LOC  NXT  * INSTRUCTION FETCH
062  053  F=1   BA=PC; DATI
053  365  F=2   B=PC+2
365  364  F=3   PC=BI CKOFF
364  061  F=4   B,IR=UNIBUS DATA
061  001  F=5   B=B SEX; BUT IR DECODE
          / IF DOUBLE OP INST GOTO S0=1 THRU S7=1 DEPENDING ON SOURCE MODE
          / IF SINGLE OP INST GOTO D0=1 THRU D7=1 DEPENDING ON DEST MODE (INCLUDING JSR)
          / IF BRANCH, CHANGE PC GOTO B=1
          / IF BRANCH, PC UNCHANGED GOTO B2=2
          / IF CLEAR OR SET COND CODE(S) GOTO CCM=1
          / IF INST=RTS GOTO R1=1
          / IF INST=RTI GOTO R2=1
          / IF INST=WAIT GOTO W=1
          / IF INST=HALT GOTO H=1
          / IF INST=RESET GOTO RST=1
          / IF INST=EMT GOTO ET=1
          / IF INST=BREAKPOINT TRAP GOTO BT=1
          / IF INST=IOT GOTO IT=1
          / IF INST=TRAP GOTO T=1
          / IF RESERVED INST (NONE OF THE ABOVE) GOTO RT=1
```

```
LOC  NXT  * SOURCE MODE 0 (REGISTER), GET SOURCE DATA
          / GET TO S0=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=0
201  007  S0=1  B=R[S]; BUT BYTE
          / IF BYTE INST GOTO SBE=1 (MUST BE EVEN BYTE)
007  001  S0=2  R[D]=B; BUT DESTINATION
          / IF IR<5:3>  =0 GOTO D0=1
          /             =1      D1=1
          /             =2      D2=1
          /             =3      D3=1
          /             =4      D4=1
          /             =5      D5=1
          /             =6      D6=1
          /             =7      D7=1
```

```
LOC  NXT  * SOURCE MODE 1 (REG, DEFERRED) GET SOURCE DATA
          / GET TO S1=1 FROM F=5 VIA BUT IR DECODE IR<11:9>
203  244  S1=1  BA=R[S]; DATI; CKOFF; ALBYT
          / GET TO S1=2 FROM S2=3 VIA GOTO
          /          "       S3=5    "
          /          "       S6=5    "
244  007  S1=2  B=UNIBUS DATA; BUT BYTE; GOTO S0=2
          / IF ODD BYTE GOTO SBO=1
          / IF EVEN BYTE GOTO SBE=1
          / IF NOT BYTE FALL THROUGH TO S0=2
```

```
LOC  NXT  * SOURCE MODE 2 (AUTO=INC,) GET SOURCE DATA
          / GET TO S2=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=2
205  301  S2=1  BA=R[S]; DATI; ALBYT
301  014  S2=2  B=R[S]+1+BYTE,BAR
          / GET TO S2=3 FROM S4=1 VIA GOTO
014  244  S2=3  R[S]=B; CKOFF; GOTO S1=2
```

```
LOC  NXT  *SOURCE MODE 3 (AUTO-INC DEFERRED) GET SOURCE DATA
          / GET TO S3=1 FROM F 5 VIA BUT IR DECODE IR<11:9>=3
207  016  S3=1  BA=R[S]; DATI (MUST BE AN EVEN ADDRESS HERE)
016  017  S3=2  B=R[S]+2
```

```
                / GET TO S3=3 FROM S5=1 VIA GOTO
017  134  S3=3  R[S]=B; CKOFF
                / GET TO S3=4 FROM S7=5 VIA GOTO
134  274  S3=4  B=UNIBUS DATA
274  244  S3=5  BA=B; DATI; CKOFF; GOTO S1=2; ALBYT
```

```
LOC  NXT  * SOURCE MODE 4 (AUTO=DEC) GET SOURCE DATA
                / GET TO S4=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=4
211  014  S4=1  B,BA=R[S]-1=BYTE,BAR; DATI; ENABOVER; GOTO S2=3; ALBYT
```

```
LOC  NXT  * SOURCE MODE 5 (AUTO=DEC DEFERRED) GET SOURCE DATA
                / GET TO S5=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=5
213  017  S5=1  B,BA=R[S]=2; DATI(MUST BE AN EVEN ADDRESS HERE); ENABOVER; GOTO S3=3
```

```
LOC  NXT  * SOURCE MODE 6 (INDEXED) GET SOURCE DATA
                / GET TO S6=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=6
215  025  S6=1  BA=PC; DATI(MUST BE EVEN ADDRESS HERE)
025  026  S6=2  B=PC+2
026  027  S6=3  PC=B; CKOFF
027  030  S6=4  B=UNIBUS DATA
030  244  S6=5  BA=B+R[S]; DATI; CKOFF; GOTO S1=2; ALBYT
```

```
LOC  NXT  * SOURCE MODE 7 (INDEXED DEFERRED) GET SOURCE DATA
                / GET TO S7=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=7
217  032  S7=1  BA=PC; DATI(MUST BE AN  EVEN ADDRESS HERE)
032  033  S7=2  B=PC+2
033  034  S7=3  PC=B; CKOFF
034  035  S7=4  B=UNIBUS DATA
035  134  S7=5  BA=B+R[S]; DATI(MUST BE AN EVEN ADDRES) ; CKOFF; GOTO S3=4
```

```
LOC  NXT  * SOURCE BYTE ODD
          / GETE TO SBO=1 FROM S1=2 VIA BUT BYTE (BYTE INST, AND SOURCE DATA ODD ADDR)
067  346  SBO=1 SHIFT B RIGHT; F SHIFT
346  324  SBO=2 SHIFT B RIGHT; F SHIFT
324  340  SBO=3 SHIFT B RIGHT; F SHIFT
340  361  SBO=4 SHIFT B RIGHT; F SHIFT
361  050  SBO=5 SHIFT B RIGHT; F SHIFT
050  020  SBO=6 SHFIT B RIGHT; F SHIFT
020  052  SBO=7 SHIFT B RIGHT; F SHIFT
052  047  SBO=8 SHIFT B RIGHT; GOTO SBE=1
```

```
LOC  NXT  * SOURCE EVEN BYTE
          / GET TO SBE=1 FROM SBO=8 VIA GOTO
          / GET TO SBE=1 FROM S1=2 VIA BUT BYTE, (BYTE INST AND SOURCE DATA EVEN ADDR)
          / GET TO SBE=1 FROM S0=1 VIA BUT BYTE, (BYTE INST,)
047  001  SBE=1 R[10]=B SEX; BUT DESTINATION
          / IF IR<5:3>  =0 GOTO D0=1
          /    "              =1   "   D1=1
          /    "              =2   "   D2=1
          /    "              =3   "   D3=1
          /    "              =4   "   D4=1
          /    "              =5   "   D5=1
          /    "              =6   "   D6=1
          /    "              =7   "   D7=1
```

```
LOC  NXT  * DEST, MODE 0 (REGISTER), GET DEST DATA, OP, AND REPLACE
          / GET TO D0=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=0)
          / GET TO D0=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=0)
101  154  D0=1  B=R[0]; BUT MOVE
          / IF INST=MOVE,BAR (OTHER THAN MOVE) AND BYTE GOTO D80=1
          / IF INST=MOVE AND BYTE GOTO MB=0
          / IF INST=MOVE AND BYTE,BAR GOTO D0=3A
          / IF INST=MOVE,BAR AND BYTE,BAR FALL THROUGH TO D0=2
157  142  D0=2  R[11]=B; BUT UNARY
          / IF INST=JMP OR JSR GOTO ERT=1 (ILLEGAL INST, TRAP)
          / IF INST=SWAB GOTO SB1=1
          / IF INST=OTHER UNARY(CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U1=1
          / GET TO D0=3 FROM U1=1 VIA GOTO
          / GET TO D0=3 FROM D0=1 VIA BUT BYTE (INST=MOVE AND BYTE,BAR)
```

```
169  332  D0=3  B_R[10] OP B; BUT NONMOD
          / THERE EXISTS A D03=A WHICH IS IDENTICAL TO D0=3 EXCEPT LOC=155
          / GET TO D0=3A FROM SB1=R VIA GOTO
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO D0=4
          / GET TO D0=4 FROM R1=6 VIA GOTO
339  040  D0=4  R[D]_B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO BRK1A
          / IF POWERFAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UATR RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```



```
LOC  NXT  * DEST, MODE 1 (REG,DEFERRED) GET DEST DATA, OP, AND REPLACE
          / GET TO D1=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=1)
          / GET TO D1=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=1)
103  200  D1=1  B,BA_R[D]; DATIP; BUT JSRMP; ALBT; CKOFF
          / NOTE DATA IN PAUSE HERE
          / IF INST=JMP GOTO J1=1
          / IF INST=JSR GOTO J2=1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2
          / GET DO D1=2 FROM D2=3 VIA GOTO
          / GET TO D1=2 FROM D3=5 VIA GOTO
          / GET TO D1=2 FROM D6=5 VIA GOTO
200  210  D1=2  B_UNIBUS DATA; BUT BYTE
          / IF ODD BYTE GOTO DO=1
          / IF EVEN BYTE GO TO DE=1
          / IF NOT BYTE FALL THROUGH TO D1=3
210  143  D1=3  R[11]_B; BUT UNARY
          / IF INST=SWAB GOTO SB2=1
          / IF INST=OTHER UNARY (CLR, COM,INC,DEC,NEG,ADC, SBC,TST,ROR,ROL,ASR,ASL) GOTO U2=1
          / GET TO D1=4 FROM DE=1 VIA BUT UNARY (NON UNARY)
          / GET TO D1=4 FROM U2=1 VIA GOTO
          / GET TO D1=4 FROM SB2=8 VIA GOTO
163  334  D1=4  B_R[10] OP B; BUT NONMOD
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO D1=5
334  065  D1=5  DATO; ALBYT; CKOFF
          / GET TO D1=6 FROM DO=18 VIA GOTO
```

```
                / IF NONMOD GOTO B2-2 (BUT SERVICE)
                / IF NOT NONMOD FALL THROUGH TO D1-5
334   065       D1-5  DATO; ALBYT; CKOFF
                / GET TO D1-6 FROM DB-18 VIA GOTO
065   305       D1-6  DRIVERS←B; GOTO B2-2 (BUT SERVICE)


LOC   NXT       * DEST MODE 2 (AUTO-INC) GET DEST DATA, OP AND REPLACE
                / GET TO D2-1 FROM S0-2 VIA BUT DESTINATION (IR<5:3>=2)
                / GET TO D2-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=2)
105   331       D2-1  BA←R[D]; DATIP; ALBYT
                / NOTE DATA IN PAUSE HERE
331   341       D2-2  B←R[D]+1+BYTE.BAR
                / GET TO D2-3 FROM D4-1 VIA GOTO
341   200       D2-3  R[D]←B; BUT JSRMP; GOTO D1-2; CKOFF
                / IF INST=JMP GOTO J1-1
                / IF INST=JSR GOTO J2-1
                / IF INST NOT JMP OR JSR FALL THROUGH TO D1-2


LOC   NXT       * DEST MODE 3 (AUTO-INC DEFERRED) GET DEST DATA, OP AND REPLACE
                / GET TO D3-1 FROM S0-2 VIA BUT DESDTINATION (IR<5:3>=3)
                / GET TO D3-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=3)
107   160       D3-1  BA←R[D]; DATI
160   070       D3-2  B←R[D]+2
                / GET TO D3-3 FROM D5-1 VIA GOTO
070   071       D3-3  R[D]←B; CKOFF
                / GET TO D3-4 FROM D7-5 VIA GOTO
071   072       D3-4  B←UNIBUS DATA
072   200       D3-5  BA←B; DATIP; BUT JSRMP; GOTO D1-2; ALBYT; CKOFF
                / NOTE DATA IN PAUSE HERE
                / IF INST=JMP GOTO J1-1
                / IF INST=JSR GOTO J2-1
                / IF INST NOT JMP OR JSR FALL THROUGH TO D1-2


LOC   NXT       * DEST MODE 4(AUTO-DEC) GET DEST DATA, OP AND REPLACE
                / GET TO S4-1 FROM S0-2 VIA BUT DESTINATRON (IR<5:3>=4)
                / GET TO S4-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=4)
111   341       D4-1  B,BA←R[D]-1-BYTE.BAR; DATIP; ENABOVER; GOTO D2-3; ALBYT
```

```
LOC  NXT  * DEST MODE 5 (AUTO-DEC DEFERRED) GET DEST DATA, OP, AND REPLACE
          / GET TO D5=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=5)
          / GET TO D5=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=5)
113  070  D5=1  B,BA=REG]=2; DATI; ENABOVER; GOTO D3=3
```

```
LOC  NXT  * DEST MODE 6 (INDEXED) GET DTA,OP, AND REPLACE
          / GET TO D6=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=6)
          / GET TO D6=1 FROM SBE=1 VIA BUT DESTINAITON (IR<5:2>=6)
115  075  D6=1  BA=PC; DATI
075  077  D6=2  B=PC+2
077  057  D6=3  PC=B; CKOFF
057  300  D6=4  B=UNIBUS DATA
300  200  D6=5  B,BA=B+REG]; DATIP; BUT JSRMP; GOTO D1=2; ALBYT; CKOFF
          / NOTE DATA IN PUASE HERE
          / IF INST=JMP GOTO J1=1
          / IF INST=JSR GOTO J2=1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2
```

```
LOC  NXT  * DEST MODE 7 (INDEXED DEFERRED) GET DEST DATA,OP, AND REPLACE
          / GET TO D7=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=7)
          / GET TO D7=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=7)
117  310  D7=1  BA=PC; DATI
310  104  D7=2  B=PC+2
104  320  D7=3  PC=B; CKOFF
320  106  D7=4  B=UNIBUS DATA
106  071  D7=5  BA=B+REG]; DATI; CKOFF; GOTO D3=4
```

```
LOC  NXT  * DESTINATION MODE 0, BYTE
          / GET TO DB0=1 FROM D0=1 VIA BUT BYTE (BYTE INST AND MOVE,BAR)
156  144  DB0=1 R[11],B=8 SEXT BUT UNARY
          / IF UNARY OTHER THAN JSR, JMP, OR SWAB (CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U3=1
```

```
304  040  DB0=3 R[D]<7:0>_B; BUT SERVICE; GOTO F=1
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERTIA
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

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```
LOC  NXT  * DESTINATION ODD BYTE
          / GET TO DO=1 FROM D1=2 VIA BUT BYTE (BYTE INST AND ODD ADDR)
270  123  DO=1  SHIFT B RIGHT; F SHIFT
123  124  DO=2  SHIFT B RIGHT; F SHIFT
124  125  DO=3  SHIFT B RIGHT; F SHIFT
125  126  DO=4  SHIFT B RIGHT; F SHIFT
126  127  DO=5  SHIFT B RIGHT; F SHIFT
127  130  DO=6  SHIFT B RIGHT; F SHIFT
130  131  DO=7  SHIFT B RIGHT; F SHIFT
131  132  DO=8  SHIFT B RIGHT
132  145  DO=9  R[11],B_B SEX; BUT UNARY
          / IF UNARY OTHER THAN JSR, JMP, OR SWAB (CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U4=1
          / IF NOT UNARY FALL THROUGH TO DO=10
165  342  DO=10 B_P[10] OP B; BUT NONMOD
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO DO=11
342  135  DO=11 SHIFT B LEFT; F SHIFT
135  136  DO=12 SHIFT B LEFT; F SHIFT
136  137  DO=13 SHIFT B LEFT; F SHIFT
137  140  DO=14 SHIFT B LEFT; F SHIFT
140  141  DO=15 SHIFT B LEFT; F SHIFT
141  142  DO=16 SHIFT B LEFT; F SHIFT
142  143  DO=17 SHIFT B LEFT; F SHIFT
143  065  DO=18 SHIFT B LEFT; DATO; CKOFF; GOTO D1=6; ALBYT
```

```
LOC  NXT  * DESTINATION EVEN BYTE
          / GET TO DE=1 FROM D1=2 VIA BUT BYTE (BYTE INST AND EVEN ADDR)
```

```
250  163  DE=1  R[11]_B SEX; GOTO D1=4; BUT UNARY
          / IF UNARY OTHER THAN JSR,JMP, OR SWAB (CLR,COM,INC,DEC,ADC,SBC,TST,ROR,ASR,ASL) GOTO U5=1
          / IF NOT UNARY FALL THROUGH TO D1=4
```

```
LOC  NXT  * UNARY OPERATORS GET SINGLE OPERAND IN B AND R[10]
          / GET TO U1=1 FROM D0=2 VIA BUT UNARY (INST=CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL)
352  162  U1=1  R[10]_B; PRE AUX; GOTO D0=3
          / GET TO U2=1 FROM D1=3 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
353  163  U2=1  R[10]_B; PRE AUX; GOTO D1=4
          / GET TO U3=1 FROM DB0=1 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
354  164  U3=1  R[10]_B; PRE AUX; GOTO DB0=2
          / GET TO U4=1 FROM D0=9 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
355  165  U4=1  R[10]_B; PRE AUX; GOTO D0=10
          / GET TO U5=1 FROM DE=1 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
373  163  U5=1  R[10]_B; PRE AUX; GOTO D1=4
```

```
LOC  NXT  * MOVB INST
          / GET TO MB=0 FROM D0=1 VIA BUT MOVE (INST=MOVE AND BYTE)
154  240  MB=0  PRE AUX
240  152  MB=1  B_R[10] OP B
152  040  MB=2  R[D]_B SEX; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BG4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * BRANCH, CHANGE PC
015  147  B=1   SHIFT B LEFT
```

```
            / IF BR7 GOTO BG=1
            / IF BR6 GOTO BG=1
            / IF INTERNAL LINE CLOCK GOTO LC=1
            / IF BR5 GOTO BG=1
            / IF BG4 GOTO BG=1
            / IF UART RECEIVE GOTO URTR
            / IF UART TRANSMIT GOTO URTX
            / IF CONSOLE STOP GOTO H=1
            / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * BRANCH, CHANGE PC
015  147  B=1   SHIFT B LEFT
147  146  B=2   B=PC+B
146  040  B=3   PC=BI BUT SERVICE
            / PRIORITIES ARE LISTED HIGHEST TO LOWEST
            / IF T BIT TRAP GOTO BT=1
            / IF STACK OVERFLOW GOTO ERT1A
            / IF POWER FAIL GOTO  PF=1
            / IF BR7 GOTO BG=1
            / IF BR6  GOTO BG=1
            / IF INTERNAL LINE CLOCK GOT LC=1
            / IF BR5 GOTO BG=1
            / IF BR4 GOTO BG=1
            / IF UART RECEIVE GOTO URTR
            / IF UART TRANSMIT GOTO URTX
            / IF CONSOLE STOP GOTO H=1
            / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * CONDITION CODE MASK (FOR BOTH SET AND CLEAR)
151  350  CCM=1 B=B AND K[17]
350  112  CCM=2 BUT DEST
            / IF INST= SET, GO TO SC=1
            / IF INST= CLEAR, GOTO CC=1
```

```
LOC  NXT  * CLEAR CONDITION CODES
112  040  CC=1  PSW=PSW AND (B',BAR), BUT SERVICE
            / THIS EFFECTIVELY CLEARS THOSE BITS OF THE PSW WHICH ARE SET
```

```
LOC  NXT  * SET CONDITION CODES
116  040  SC=1  PSW_PSW OR 8; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * SWAB, MODE 0
          / GET TO SB1=1 FROM D0=2 VIA BUT UNARY (INST=SWAB AND MODE=0)
          / ROTATE LEFT ACCOMPLISHED VIA ASR
146  172  SB1=1 ROTATE B LEFT; F SHIFT
172  173  SB1=2 ROTATE B LEFT; F SHIFT
173  174  SB1=3 ROTATE B LEFT; F SHIFT
174  144  SB1=4 ROTATE B LEFT; F SHIFT
144  176  SB1=5 ROTATE B LEFT; F SHIFT
176  177  SB1=6 ROTATE B LEFT; F SHIFT
177  006  SB1=7 ROTATE B LEFT; F SHIFT
006  155  SB1=8 ROTATE B LEFT; PRE AUX; GOTO D0=3A
```

```
LOC  NXT  * SWAB, NOT MODE 0
          / GET TO SB2=1 FROM D1=3 VIA BUT UNARY (INST=SWAB)
          / ROTATE LEFT ACCOMPLISHED VIA ASR
167  012  SB2=1 ROTATE B LEFT; F SHIFT
012  220  SB2=2 ROTATE B LEFT; F SHIFT
220  022  SB2=3 ROTATE B LEFT; F SHIFT
022  023  SB2=4 ROTATE B LEFT; F SHIFT
023  024  SB2=5 ROTATE B LEFT; F SHIFT
024  031  SB2=6 ROTATE B LEFT; F SHIFT
031  330  SB2=7 ROTATE B LEFT; F SHIFT
330  163  SB2=8 ROTATE B LEFT; PRE AUX; GOTO D1=4
```

```
LOC  NXT  * JMP
          / GET TO J1-1 FROM D1-1 VIA BUT JSRMP (INST=JMP)
          / GET TO J1-1 FROM D2-3 VIA BUT JSRMP (INST=JMP)
          / GET TO J1-1 FROM D3-5 VIA BUT JSRMP (INST=JMP)
          / GET TO J1-1 FROM D6-5 VIA BUT JSRMP (INST=JMP)
204  260  J1-1  NOP
          / J1-1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL
          / BE FORCED TO TAKE DATA FROM THE UNIBUS.
260  040  J1-2  PC_B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT-1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF-1
          / IF BR7 GOTO BG-1
          / IF BR6 GOTO BG-1
          / IF INTERNAL LINE CLOCK GOTO LC-1
          / IF BR5 GOTO BG-1
          / IF BR4 GOTO BG-1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H-1
          / IF NONE OF THE ABOVE GOTO F-1
```

```
LOC  NXT  * JSR
          / GET TO J2-1 FROM D1-1 VIA BUT JSRMP (INST=JSR)
          / GET TO J2-1 FROM D2-3 VIA BUT JSRMP (INST=JSR)
          / GET TO J2-1 FROM D3-5 VIA BUT JSRMP (INST=JSR)
          / GET TO J2-1 FROM D6-5 VIA BUT JSRMP (INST=JSR)
212  261  J2-1  NOP
          / J2-1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL BE
          / FORCED TO TAKE DATA FROM THE UNIBUS.
261  262  J2-1A R[11]_B
262  214  J2-2  B,BA_R161-2; ENABOVER
214  206  J2-3  R[6]_B; CKOFF; DATO
206  216  J2-4  DRIVERS_R[S]
216  263  J2-5  B_PC
263  264  J2-6  R[S]_B
264  265  J2-7  B_R[11]
265  040  J2-8  PC_B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT-1
```

```
LOC  NXT  * JSR
          / GET TO J2=1 FROM D1=1 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D2=3 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D3=5 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D6=6 VIA BUT JSRMP (INST=JSR)
212  261  J2=1  NOP
          / J2=1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL BE
          / FORCED TO TAKE DATA FROM THE UNIBUS,
261  262  J2=1A R[11]=B
262  214  J2=2  B,BA=R[6]=2; ENABOVER
214  206  J2=3  R[6]=B; CKOFF; DATO
206  216  J2=4  DRIVERS=R[S]
216  263  J2=5  B=PC
263  264  J2=6  R[S]=B
264  265  J2=7  B=R[11]
265  040  J2=8  PC=B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOT ERT1A
          / IF POWER FALIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * RTS
          / GET TO R1=1 FROM F=5 VIA BUT IR DECODE (INST=RTS)
005  221  R1=1  BA=R[6]; DATI
221  222  R1=2  B=R[6]=2
222  223  R1=3  R[6]=B
223  224  R1=4  B=R[0]
224  225  R1=5  PC=B; CKOFF
225  332  R1=6  B=UNIBUS DATA; GOTO D0=4
```

```
LOC  NXT  * RTI
          / GET TO R2=2 FROM F=5 VIA BUT IR DECODE (INST=RTI)
227  230  R2=1  BA=R[6]; DATI
230  231  R2=2  B=R[6]=2
```

```
231  232  R2=3  R[6]=B! CKOFF
232  234  R2=4  PC=UNIBUS DATA
             / THERE IS NO R2=5 (ANY MORE)
234  235  R2=6  BA=R[6]! DATI
235  236  R2=7  B=R[6]+2
236  237  R2=8  R[6]=B! CKOFF
237  305  R2=9  PS=UNIBUS DATA! GOTO B2=2 (BUT SERVICE)
```

```
LOC  NXT  * WAIT
          / GET TO W=1 FROM F=5 VIA BUT IR DECODE (INST=WAIT)
          / GET TO W=1 FROM W=1 VIA GOTO IF BUT SERVICE IS FALSE
063  040  W=1   BUT SERVICE
          / THE MICRO PROGRAM WILL LOOP ON W=1 UNTIL SOME HIGHER
          / PRIORITY CONDITION IS RECOGNIZED BY THE 'BUT SERVICE' ROM SEE F101 ON
          / THE CONE PRINT,
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOT PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE URTR
          / IF UART TRANSMIT TOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE TOTO F=1
```

```
LOC  NXT  * HALT
          / GET TO H=1 FROM F=5 VIA BUT IR DECODE (INST=HALT)
          / GET TO H=1 FROM BUT SERVICE
041  302  H=1   B=PC
          / DISPLAY PC IN LIGHTS BY PUTTING IT INTO B
          / GET TO H=2 FROM CE1=3 VIA GOTO
          / GET TO H=2 FROM CD1=5 VIA GOTO
          / GET TO H=2 FROM CL=3 VIA GOTO
302  300  H=2   BA=R[17]! BUT SWITCH
          / THE BA IS LOADED HERE SO THAT THE ADDRESS WILL BE INCREMENTED BY +1 WHEN EXAMINING (DEPOSITING INT
          / AND BY +2 WHEN EXAMINING (DEPOSITING INTO) SUCCESSIVE CORE MEMORY,
          / IF START DEPRESSED GOTO CS=1
          / IF CONTINUE DEPRESSED GOTO CCS=1
```

```
            / IF EXAMINE (1 ST) GOTO CE1=1

            / IF EXAMINE (NOT 1 ST) GOTO CE2=1
            / IF DEPOSIT (1 ST) GOTO CD1=1
            / IF DEPOSIT (NOT 1 ST) GOT CD2=1
            / IF LOAD GOTO CL=1
            / IF NO SWITCHES ARE DEPRESSED LOOP ON H=2
```

```
LOC  NXT  * EMT TRAP (VECTOR LOC=30)
          / GET TO ET=1 FROM F=5 VIA BUT IR DECODE (INST=EMT)
P11  245  ET=1  B=K[30]
          / GET TO ET=2 FROM BT=1 VIA GOTO
          / GET TO ET=2 FROM IT=1 VIA GOTO
          / GET TO ET=2 FROM T=1 VIA GOTO
          / GET TO ET=1 FROM RT=1 VIA GOTO
          / GET TO ET=2 FROM ERT=1 VIA GOTO
          / GET TO ET=2 FROM PF=1 VIA GOTO
245  246  ET=2  R[12]=B
246  247  ET=3  B,BA=R[6]=2) ENABOVER
          / ET=4 HAS BEEN ELIMINATED
247  226  ET=5  R[6]=B) CKOFF) DATO
226  251  ET=6  DIRVERS=PS
251  252  ET=7  B,BA=R[6]=2) ENABOVER
252  253  ET=8  R[6]=B) CKOFF) DATO
253  254  ET=9  DIRVERS=PC
254  255  ET=10 BA=R[12]) DATI) CKOFF
255  256  ET=11 PC=UNIBUS DATA
256  257  ET=12 BA=R[12]=2) DATI) CKOFF
257  325  ET=13 PS=UNIBUS DATA)  GOTO B2=2 (SERVICE)
```

```
LOC  NXT  * BREAKPOINT TRAP (VECTOR LOC=14) AND T BIT TRACE TRAP
          / GET TO BT=1 FROM ALL BUT SERVICE
          / GET TO BT=1 FROM F=5 VIA BUT IR DECODE (INST=BREAKPOINT)
045  245  BT=1  B=K[14]) GOTO ET=2
```

```
LOC  NXT  * IOT (VECTOR LOC=20)
          / GET TO IT=1 FROM F=5 VIA BUT IR DECODE (INST=IOT
273  245  IT=1  B=K[20]) GOTO ET=2
```

```
LOC  NXT  * TRAP (VECTOR LOC=34)
          / GET TO T=1 FROM F=5 VIA BUT IR DECODE (INST=TRAP)
021  245  T=1   B=K[34]; GOTO ET=2


LOC  NXT  * RESERVED INST TRAP (VECTOR LOC=10)
          / GET TO RT=1 FROM F=5 VIA BUT IR DECODE (INST=NON VALID)
001  245  RT=1  B=K[10]; GOTO ET=2


LOC  NXT  * ERROR TRAP (BUS ERROR, STACK OVERFLOW, ILLEGAL INST) VECTOR LOC=4
          / THERE EXISTS ERT=1 (LOC=10) FOR BUS ERROR
          / THERE ALSO EXISTS ERT1A (LOC=46) FOR STACK OVERFLOW
          / ERT1A GOES TO ET2=2, A SEQUENCE WHICH DOESN'T HAVE THE
          / ENABOVER,  WE DON'T WANT TO LOOK FOR STACK OVERFLOW WHILE
          / DOING THE STACK OVERFLOW TRAP,  THE ET2=2 SEQUENCE REJOINS THE ET SEQUENCE AT ET=8
          / THERE ALSO EXISTS ERT1B (LOC=153) FOR ILLEGAL INST (JSR OR JMP, MODE 0)
010  245  ERT=1 B=K[4]; GOTO ET=2


LOC  NXT  * CONSOLE START SWITCH
          / GET TO CS=1 FOLLOWING RELEASE OF START SWITCH,
100  322  CS=1  IR=ZERO
          / CLOCKING THE IR TURNS ON THE RUN LIGHT
322  321  CS=2  BA,B=R[17]
321  040  CS=3  PC=B; BUT SERVICE
          / PRIOIRTIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT BRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
```

```
        / IF BR4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRANSMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * CONSOLE EXAMINE SWITCH= FIRST TIME IN SEQUENCE (DON'T INC R[17])
          / GET TO CE1=1 FROM H=2 VIA BUT SWITCH
          / GET TO CE1=1 FROM CE2=2 VIA GOTO
317  307  CE1=1 BA,B=R[17]; BUT SWITCH
          / DISPLAY ADDRESS BY PUTTING INTO THE B REGISTER WHILE EXAMINE IS DOWN
          / LOOP ON CE1=1 UNTIL SWITCH IS RELEASED
307  326  CE1=2 DATI; CKOFF
326  302  CE1=3 B=UNIBUS DATA; GOTO H=2
```

```
LOC  NXT  * CONSOLE EXAMINE SWITCH = OTHER THAN FIRST IN SEQUENCE (INC R[17])
          / GET TO CE2=1 FROM H=2 VIA BUT SWITCH
315  371  CE2=1 B=R[17]+2
          / R[17] IS IN BA FROM H=2, THIS WILL CAUSE +2 TO BECOME +1 WHEN EXAMINING REGISTERS,
371  317  CE2=2 R[17]=B; GOTO CE1=1
```

```
LOC  NXT  * CONSOLE DEPOSIT SWITCH = FIRST TIME IN SEQUENCE (DON'T INC R[17])
          / GET TO CD1=1 FROM H=2 VIA BUT SWITCH
          / GET TO CD1=1 FROM CD2=2 VIA GOTO
313  303  CD1=1 B=R[17]; BUT SWITCH
          / LOOP ON CD1=1 UNTIL DEPOSIT SWITCH IS RELEASED
303  374  CD1=2 BA=K[207],BAR; DATI; CKOFF
          / COMPLEMENT OF 207 = 177570 = SWITCH REGISTER ADDRESS
374  314  CD1=3 B=UNIBUS DATA
314  372  CD1=4 BA=R[17]; DATO; CKOFF
372  302  CD1=5 DRIVERS=B; GOTO H=2
```

```
LOC  NXT  * CONSOLE DEPOSIT SWITCH = OTHER THAN FIRST IN SEQENCE (INC R[17])
          / GET TO CD2=1 FROM H=3) VIA BUT SWITCH
312  337  CD2=1 B=R[17]+2
          / R[17] IS IN BA, THIS WILL CAUSE +2 TO BECOME +1 WHEN DEPOSITING INTO REGISTERS
337  313  CD2=2 R[17]=B; GOTO CD1=1
```

```
LOC  NXT  * CONSOLE CONTINUE SWITCH
          / GET TO CCS=1 FROM H=2 VIA BUT SWITCH
316  276  CCS=1 B=PC
276  270  CCS=2 BUT SWITCH
272  062  CCS=3 IR=ZERO; GOTO F=1
          / CLOCKING THE IR TURNS ON THE RUN LIGHT
```

```
LOC  NXT  * CONSOLE LOAD SWITCH
          / GET TO CL=1 FROM H=2 VIA BUT SWITCH
311  375  CL=1  BA=K[207],BAP; DATI; CKOFF
          / COMPLEMENT OF 207 = 177570 = SWITCH REGISTER ADDRSS
375  367  CL=2  B=UNIBUS DATA
367  302  CL=3  R[17]=B; GOTO H=2
          / CL=3 GOES TO H=2 VIA GOTO, IF LOAD IS STILL DEPRESSED, THE BUT
          / SWITCH IN H=2 WILL TAKE US BACK TO CL=1.  THUS, AS LONG AS LOAD IS
          / DEPPRESSED, CHANGES IN THE SWITCHES WILL SHOW UP IN THE B REG (LIGHTS) AND IN R[17].
```

```
LOC  NXT  * POWER FAIL (VECTOR LOC=24)
          / GET TO PF=1 FROM SERVICE
043  245  PF=1  B=K[24]; GOTO ET=2
```

```
LOC  NXT  * RESTART FROM POWER FAIL (VECTOR LOC=24)
          / GET TO RS=1 MYSTERIOUSLY AS POWER COMES UP ( NXT CHIPS, F092 AND F103 SHOWN ON THE CONF PRINT,
          / ARE DISABLED FORCING THE MICROPROGRAM TO RS=1 IN LOC 0)
000  241  RS=1  BA=K[24]; DATI
241  347  RS=1A CKOFF
```

```
                / MUST DO CKOFF IN RS=1A BECAUSE OF CONFLICT BETWEEN
                / CKOFF AND INIT CREATED BY CKOFF ASSOCIATED WITH AUX CONTROL
   347  074     RS=2  PC=UNIBUS DATA
   074  351     RS=3  BA=K[24]+2) DATI) CKOFF
   351  305     RS=4  PS=UNIBUS DATA)  GOTO B2=2 (SERVICE)


LOC  NXT   * INTERRUPT SERVICING
                / GET TO INT=1 FROM BG=2 VIA BUT INT (TRUE)
   325  246     INT=1 R[12]=UNIBUS DATA) SET SLAVESYNC) GOTO ET=3


LOC  NXT   * BUS GRANT SERVICE
                / GET TO BG=1 FROM BUT SERVICE
   040  305     BG=1  BUT INTERRUPT) GOTO B2=2 (BUT SERVICE)
                / IF INTERRUPT GOTO INT=1
                / IF NO INTERRUPT FALL THROUGH TO B2=2


LOC  NXT   * NOP = BRANCH CONDITION NOT TRUE (PC UNCHANGED)
                / B2=1 HAS BEEN ELIMINATED BECAUSE NEWI IS NO LONGER
                / GET TO B2=2A FROM D0=3 VIA BUT NONMOD (TRUE)
                / GET TO B2=2B FROM D1=4 VIA BUT NONMOD (TRUE)
                / GET TO B2=2C FROM DD=10 VIA BUT NONMOD (TRUE)
                / GET TO B2=2D FROM F=5 VIA BUT IR DECODE, BRANCH INST, CONDITION NOT TRUE
                / GET TO B2=2 FROM RST=1 VIA GOTO
                / GET TO B2=2 FROM D0=4 VIA GOTO
                / GET TO B2=2 FROM DB0=2  VIA BUT NONMOD (TRUE)
                / GET TO B2=2 FROM MB=2 VIA GOTO
                / GET TO B2=2 FROM CC=1 VIA GOTO
                / GET TO B2=2 FROM SC=1 VIA GOTO
                / GET TO B2=2 FROM J2=8 VIA GOTO
                / GET TO B2=2 FROM RS=1D VIA GOTO
                / GET TO B2=2 FROM ET=13 VIA GOTO
   305  040     B2=2  BUT SERVICE
                / PRIORITIES ARE LISTED HIGHEST TO LOWEST
                / IF T BIT TRAP GOTO BT=1
                / IF STACK OVERFLOW GOTO ERT1A
                / IF POWER FAIL GOTO PF=1
                / IF BR7 GOTO BG=1
```

```
/ IF BR6 GOTO BG=1
/ IF INTERNAL LINE CLOCK GOTO LC=1
/ IF BR5 GOTO BG=1
/ IF BR4 GOTO BG=1
/ IF UART RECEIVE GOTO URTR
/ IF UART TRANSMIT GOTO URTX
/ IF CONSOLE STOP GOTO H=1
/ IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * RESET
          / GET TO RST=1 FROM F=5 VIA BUT IR DECODE (INST=RESET)
357  305  RST=1 BUT INIT) CKOFF) GOTO B2=2 (BUT SERVICE)
```

```
LOC  NXT  * DOUBLE BUS ERROR, GOTO HALT
110  041  DBE=1 NOP) GOTO H=1
```

```
LOC  NXT  * UART XMIT (VECTOR LOC 64)
260  245  URTX  B=K[64]; GOTO ET=2
```

```
LOC  NXT  * UART RECEIVE (VECTOR LOC 62)
064  245  URTR  B=K[60]; GOTO ET=2
```

```
LOC  NXT  * LINE CLOCK (VECTOR LOC 100)
042  245  LC=1  B=K[100]; GOTO ET=2
```

```
ERT1A NOT EXPLICITLY SHOWN IN FLOW
D0-3A NOT EXPLICITLY SHOWN IN FLOW
A145  NOT EXPLICITLY SHOWN IN FLOW
ET2-2 NOT EXPLICITLY SHOWN IN FLOW
ET2-3 NOT EXPLICITLY SHOWN IN FLOW
ET2-5 NOT EXPLICITLY SHOWN IN FLOW
ET2-6 NOT EXPLICITLY SHOWN IN FLOW
ET2-7 NOT EXPLICITLY SHOWN IN FLOW
ERT1B NOT EXPLICITLY SHOWN IN FLOW
B2-2A NOT EXPLICITLY SHOWN IN FLOW
B2-2B NOT EXPLICITLY SHOWN IN FLOW
B2-2C NOT EXPLICITLY SHOWN IN FLOW
B2-2D NOT EXPLICITLY SHOWN IN FLOW
```

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1	A B C D E	
2	A A A A B	
3	A B B B C	
4	A A B C D	
5	A A A B B	
6	A A A A B	

	ECO NO.	ETCH REV.	ENG.	DATE
1	00002		BA	8-21-72
2	KD11B 00003		MT	9-24-72
3	KD11B 00004		MT	10-30-72
4	KD11B-00005		DR	8-15-73
5	KD11B-00006		DR	6-14-74

FIRST USED ON OPTION/MODEL

KD11-B

DRN. A. Tomm	DATE 8-21-72	
CHK'D. R McGillivray	DATE 8-21-72	
ENG. B. ARMSTRONG	DATE 8-29-72	
PROJ. ENG. B. ARMSTRONG	DATE 8-29-72	
PROD.	DATE	

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE
MICROPROGRAM
SYMBOLIC
LISTING

NEXT HIGHER ASSY.
B-DD-KD11-B

SCALE —

SHEET 1 OF 6

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-2	E

DIST.

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKD	CRI	FSH	PSW	SAM	SPA	SPE	TNS	NXT
A145	145	YES	PSW	AA	ON	L	+1	H	MOV	NON	ON	OFF	OFF	L	ROM	R0	WRI	ZRO	
B-1	015	NO	SP	ASL	OFF	H	BRG	SL	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	B-2
B-2	147	NO	SP	A+B	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	B-3
B-3	146	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG-1
B2-2	305	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2A	333	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2B	335	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2C	343	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2D	013	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
BG-1	040	NO	SP	AL	OFF	H	BRG	H	INT	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	B2-2
BT-1	045	NO	NUL	AL	OFF	H	BRG	L	CON	14	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET-2
CC-1	112	NO	PSW	ABBAR	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	BG-1
CCM-1	151	NO	NUL	AANDB	OFF	H	BRG	L	CON	360	OFF	OFF	OFF	H	ROM	R0	WRI	NON	CCM-2
CCM-2	350	NO	SP	AL	OFF	H	BRG	H	DST	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	CC-1
CCS-1	316	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	CCS-2
CCS-2	276	NO	SP	AL	OFF	H	BRG	H	SW	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	D0-1
CCS-3	272	NO	SP	ZERO	OFF	H	BRG	H	IRC	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	F-1
CD1-1	313	NO	SP	AL	OFF	H	BRG	L	SW	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	CD1-2
CD1-2	303	NO	NUL	ABAR	OFF	L	BRG	H	CON	207	ON	OFF	OFF	H	ROM	R0	WRI	I	CD1-3
CD1-3	374	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	CD1-4
CD1-4	314	NO	SP	AL	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R17	REA	0	CD1-5
CD1-5	372	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	H-2
CD2-1	312	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R17	REA	NON	CD2-2
CD2-2	337	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R17	WRI	NON	CD1-1
CE1-1	317	NO	SP	AL	OFF	L	BRG	L	SW	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	CE1-2
CE1-2	307	NO	SP	AL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	I	CE1-3
CE1-3	326	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	H-2
CE2-1	315	NO	SP	A+B	OFF	L	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R17	REA	NON	CE2-2
CE2-2	371	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R17	WRI	NON	CE1-1
CL-1	311	NO	NUL	ABAR	OFF	L	BRG	H	CON	207	ON	OFF	OFF	H	ROM	R0	WRI	I	CL-2
CL-2	375	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	CL-3
CL-3	367	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R17	WRI	NON	H-2
CS-1	100	NO	SP	ZERO	OFF	H	BRG	H	IRC	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	CS-2
CS-2	322	NO	SP	AL	OFF	L	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	CS-3
CS-3	321	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG-1
D0-1	101	NO	SP	AL	OFF	H	BRG	L	MOV	NON	OFF	OFF	OFF	H	JRD	R0	REA	NON	MB-0
D0-2	157	NO	SP	BL	OFF	H	BRG	H	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	D0-17
D0-3	162	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	D0-4
D0-3A	155	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	D0-4
D0-4	332	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	JRD	R0	WRI	NON	BG-1
D1-1	103	YES	SP	AL	OFF	L	BRG	L	JOT	NON	OF	OFF	OFF	H	JRD	R0	REA	IP	D1-2
D1-2	200	NO	NUL	AL	OFF	H	BRG	L	BYT	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D1-3
D1-3	210	NO	SP	BL	OFF	H	BRG	H	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	D0-18
D1-4	163	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	D1-5

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW	SAM	SPA	SPF	TNS	NXT
D1=5	334	YES	SP	AL	OFF	H		BRG H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	0	D1=6
D1=6	065	NO	SP	BL	OFF	H		BRG H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	B2=2
D2=1	105	YES	SP	AL	OFF	L		BRG H	NON	NON	OFF	OFF	OFF	H	IRD	R0	REA	IP	D2=2
D2=2	331	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRD	R0	REA	NON	D2=3
D2=3	341	NO	SP	BL	OFF	H		BRG H	JOJ	NON	ON	OFF	OFF	H	IRD	R0	WRI	NON	D1=2
D3=1	107	NO	SP	AL	OFF	L		BRG H	NON	NON	OFF	OFF	OFF	H	IRD	R0	REA	I	D3=2
D3=2	160	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRD	R0	REA	NON	D3=3
D3=3	070	NO	SP	BL	OFF	H		BRG H	NON	NON	ON	OFF	OFF	H	IRD	R0	WRI	NON	D3=4
D3=4	071	NO	NUL	AL	OFF	H		BRG L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D3=5
D3=5	072	YES	SP	BL	OFF	L		BRG H	JOJ	NON	ON	OFF	OFF	H	ROM	R0	REA	IP	D1=2
D4=1	111	YES	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	IRD	R0	REA	IP	D2=3
D5=1	113	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	IRD	R0	REA	I	D3=3
D6=1	115	NO	SP	AL	OFF	L		BRG H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	D6=2
D6=2	075	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	D6=3
D6=3	077	NO	SP	BL	OFF	H		BRG H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	D6=4
D6=4	057	NO	NUL	AL	OFF	H		BRG L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D6=5
D6=5	300	YES	SP	A+B	OFF	L		BRG L	JOJ	NON	ON	OFF	OFF	H	IRD	R0	REA	IP	D1=2
D7=1	117	NO	SP	AL	OFF	L		BRG H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	D7=2
D7=2	310	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	D7=3
D7=3	104	NO	SP	BL	OFF	H		BRG H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	D7=4
D7=4	320	NO	NUL	AL	OFF	H		BRG L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D7=5
D7=5	106	NO	SP	A+B	OFF	L		BRG H	NON	NON	ON	OFF	OFF	H	IRD	R0	REA	I	D3=4
DB0=1	156	NO	SP	BL	OFF	H		BRG L	SEX	L	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	SB1=5
DB0=2	164	NO	SP	ABAR	OFF	H		BRG L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	DB0=3
DB0=3	304	NO	SPR	BL	OFF	H		BRG H	SRV	NON	OFF	OFF	OFF	H	IRD	R0	WRI	NON	BG=1
DBE=1	110	NO	SP	AL	OFF	H		BRG H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	H=1
DF=1	250	NO	SP	BL	OFF	H		BRG L	SEX	L	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	D1=4
DO=1	270	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=2
DO=10	165	NO	SP	ABAR	OFF	H		BRG L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	DO=11
DO=11	342	NO	SP	AL	OFF	H		BRG SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=12
DO=12	135	NO	SP	AL	OFF	H		BRG SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=13
DO=13	136	NO	SP	AL	OFF	H		BRG SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=14
DO=14	137	NO	SP	AL	OFF	H		BRG SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=15
DO=15	140	NO	SP	AL	OFF	H		BRG SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=16
DO=16	141	NO	SP	AL	OFF	H		BRG SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=17
DO=17	142	NO	SP	AL	OFF	H		BRG SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=18
DO=18	143	YES	SP	AL	OFF	H		BRG SL	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	0	D1=6
DO=2	123	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=3
DO=3	124	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=4
DO=4	125	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=5
DO=5	126	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=6
DO=6	127	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=7
DO=7	130	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=8
DO=8	131	NO	SP	AL	OFF	H		BRG SR	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	DO=9

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW	SAM	SPA	SPF	TNS	NXT
DO=9	132	NO	SP	BL	OFF	H	SEX	L	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	A145
ERT=1	010	NO	NUL	AL	OFF	H	BRG	L	CON	4	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
ERT1A	046	NO	NUL	AL	OFF	H	BRG	L	CON	4	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET2=2
ERT1B	153	NO	NUL	AL	OFF	H	BRG	L	CON	4	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
ET=1	011	NO	NUL	AL	OFF	H	BRG	L	CON	30	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
ET=10	254	NO	SP	AL	OFF	L	BRG	H	TRC	NON	ON	OFF	OFF	H	ROM	R12	REA	T	ET=11
ET=11	255	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	ET=12
ET=12	256	NO	SP	A+B	OFF	L	+1	L	NON	NON	ON	ON	OFF	H	ROM	R12	REA	T	ET=13
ET=13	257	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	R2=2
ET=2	245	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R12	WRI	NON	ET=3
ET=3	246	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET=5
ET=5	247	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	ET=6
ET=6	226	NO	PSW	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	ET=7
ET=7	251	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET=8
ET=8	252	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	ET=9
ET=9	253	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	ET=10
ET2=2	003	NO	SP	BL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R12	WRI	NON	ET2=3
ET2=3	004	NO	SP	A=B=1	OFF	L	+1	L	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET2=5
ET2=5	036	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	ET2=6
ET2=6	037	NO	PSW	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	ET2=7
ET2=7	051	NO	SP	A=B=1	OFF	L	+1	L	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET=8
F=1	062	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	T	F=2
F=2	053	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	F=3
F=3	365	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	F=4
F=4	364	NO	NUL	AL	OFF	H	BRG	L	TRC	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	F=5
F=5	061	NO	SP	BL	OFF	H	SEX	L	IRD	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	RT=1
H=1	041	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	H=2
H=2	302	NO	SP	AL	OFF	L	BRG	H	SW	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	D6=5
INT=1	325	NO	SP	AL	OFF	H	BRG	H	SVS	NON	OFF	OFF	OFF	H	ROM	R12	WRI	NON	ET=3
IT=1	273	NO	NUL	AL	OFF	H	BRG	L	CON	20	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
J1=1	204	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	J1=2
J1=2	260	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG=1
J2=1	212	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	J2=1A
J2=1A	261	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	J2=2
J2=2	262	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	J2=3
J2=3	214	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	J2=4
J2=4	206	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	TRS	R0	REA	NON	J2=5
J2=5	216	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	J2=6
J2=6	263	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	TRS	R0	WRI	NON	J2=7
J2=7	264	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R11	REA	NON	J2=8
J2=8	265	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG=1
LC=1	042	NO	NUL	AL	OFF	H	BRG	L	CON	100	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
MB=0	154	NO	SP	AL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	MB=1
MB=1	240	NO	SP	ABAR	OFF	H	BRG	L	NON	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	MB=2

NAME	LOC	ABT	ALG	ALT	AUX	BAR	BLG	BPS	BUT	CON	CRU	CRT	FSH	PSH	SAM	SPA	SPF	TWS	AXT
MB=2	152	NO	SP	BL	OFF	H	SEX	H	SRV	NON	OFF	OFF	OFF	H	IRD	R0	WRI	NON	BG=1
PF=1	043	NO	NUL	AL	OFF	H	BRG	L	CON	24	OFF	OFF	OFF	H	ROM	R0	WRI	NON	E1=2
R1=1	005	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	I	R1=2
R1=2	221	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R6	REA	NON	R1=3
R1=3	222	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	WRI	NON	R1=4
R1=4	223	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	IRD	R0	REA	NON	R1=5
R1=5	224	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	R1=6
R1=6	225	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D0=4
R2=1	227	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	I	R2=2
R2=2	230	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R6	REA	NON	R2=3
R2=3	231	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	NON	R2=4
R2=4	232	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	R2=6
R2=6	234	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	I	R2=7
R2=7	235	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R6	REA	NON	R2=8
R2=8	236	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	NON	R2=9
R2=9	237	NO	NUL	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	B2=2
RS=1	000	NO	NUL	AL	OFF	L	BRG	H	CON	24	OFF	OFF	OFF	H	ROM	R0	WRI	I	RS=1A
RS=1A	241	NO	SP	AL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	NON	RS=2
RS=2	347	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	RS=3
RS=3	074	NO	NUL	A+B	OFF	L	+1	H	CON	24	ON	ON	OFF	H	ROM	R0	WRI	I	RS=4
RS=4	351	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	B2=2
RST=1	357	NO	SP	AL	OFF	H	BRG	H	INI	NON	ON	OFF	OFF	H	ROM	R0	REA	NON	B2=2
RT=1	001	NO	NUL	AL	OFF	H	BRG	L	CON	10	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
S0=1	201	NO	SP	AL	OFF	H	BRG	L	BYT	NON	OFF	OFF	OFF	H	IRS	R0	REA	NON	S0=2
S0=2	007	NO	SP	BL	OFF	H	BRG	H	DST	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	RT=1
S1=1	203	YES	SP	AL	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	REA	I	S1=2
S1=2	244	NO	NUL	AL	OFF	H	BRG	L	BYT	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S0=2
S2=1	205	YES	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S2=2
S2=2	301	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRS	R0	REA	NON	S2=3
S2=3	014	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	WRI	NON	S1=2
S3=1	207	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S3=2
S3=2	016	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRS	R0	REA	NON	S3=3
S3=3	017	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	WRI	NON	S3=4
S3=4	134	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S3=5
S3=5	274	YES	SP	BL	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	I	S1=2
S4=1	211	YES	SP	A=B=1	OFF	L	+1	L	END	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S2=3
S5=1	213	NO	SP	A=B=1	OFF	L	+1	L	END	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S3=3
S6=1	215	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	S6=2
S6=2	025	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	S6=3
S6=3	026	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	S6=4
S6=4	027	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S6=5
S6=5	030	YES	SP	A+B	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	REA	I	S1=2
S7=1	217	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	S7=2
S7=2	032	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	S7=3

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW	SAM	SPA	SPF	TNS	NXT
S7=3	033	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	S7=4
S7=4	034	NO	NUL	AL	OFF	H	BRG	T	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S7=5
S7=5	035	NO	SP	A+B	OFF	L	BRG	R	NON	NON	ON	OFF	OFF	H	TRS	R0	REA	T	S3=4
SB1=1	166	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=2
SB1=2	172	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=3
SB1=3	173	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=4
SB1=4	174	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=5
SB1=5	144	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=6
SB1=6	176	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=7
SB1=7	177	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=8
SB1=8	006	NO	SP	ASR	ON	H	BRG	SL	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	D0=3A
SB2=1	167	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=2
SB2=2	012	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=3
SB2=3	220	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=4
SB2=4	022	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=5
SB2=5	023	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=6
SB2=6	024	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=7
SB2=7	031	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=8
SB2=8	330	NO	SP	ASR	ON	H	BRG	SL	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	D1=4
SBE=1	047	NO	SP	BL	OFF	H	SEX	H	DST	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	RT=1
SB0=1	067	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=2
SB0=2	146	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=3
SB0=3	324	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=4
SB0=4	340	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=5
SB0=5	361	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=6
SB0=6	050	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=7
SB0=7	020	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=8
SB0=8	052	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	SBE=1
SC=1	116	NO	PSW	AORB	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	BG=1
T=1	021	NO	NUL	AL	OFF	H	BRG	L	CON	34	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
U1=1	352	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D0=3
U2=1	353	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D1=4
U3=1	354	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	DB0=2
U4=1	355	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D0=10
U5=1	371	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D1=4
URTR	064	NO	NUL	AL	OFF	H	BRG	L	CON	60	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
URTX	060	NO	NUL	AL	OFF	H	BRG	L	CON	64	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
W=1	063	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG=1

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1	A B C D E	
2	A A A A B	
3	A B B B C	
4	A A B B B	
5	A A A B C	
6	A A A B C	
7	A A A A B	

ETCH REV.	ECO NO.	ENG.	DATE
	00002	BA	8-21-72
	KD11B 00003	MT	9-24-72
	KD11B 00004	MT	10-30-72
	KD11B - 00005	DR	8-15-73
	KD11B-00006	D.R.	5-30-74

FIRST USED ON OPTION/MODEL

KD11 - B

DRN. M. Towe	DATE 8-21-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. E McCollum	DATE 8-21-72	
ENG. B. ARMSTRONG	DATE 8-29-72	TITLE MICROPROGRAM BINARY LISTING
PROJ. ENG. B. ARMSTRONG	DATE 8-29-72	
PROD.	DATE	

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 1 OF 7

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-3	E

DIST.

NAM	LOC	NXT		ALU	CRI	FSH	AUX	PSW	PP1	S3P	D1P	SMB	P0T	MP1	BBT	BAR	BTP	SPF	S2	CKT	ALG	ABN	BRG	BUT
A145	145	0000	0000	0000	0	0	1	0	0	0	0	1	0	1	0	0	1	0	0	0	0	00	00	00	0101
B=1	015	1001	1000	1100	0	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	01	1111
B=2	147	1001	1001	0110	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	11	11	11	1111
B=3	146	1101	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	11	11	00	1100
B2=2	305	1101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1100
B2=2A	333	1101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1100
B2=2B	335	1101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1100
B2=2C	343	1101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1100
B2=2D	013	1101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1100
BG=1	040	0011	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	0001
BT=1	045	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	0	1	11	10	11	1101
CC=1	112	1101	1111	0010	1	0	1	1	0	0	0	1	1	0	1	1	1	1	1	0	1	11	00	00	1100
CCM=1	151	0001	0111	0001	1	0	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	11	10	11	1101
CCM=2	350	1011	0101	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	11	11	00	1001
CCS=1	316	0100	0001	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	11	11	11	1111
CCS=2	276	0100	0111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	11	11	00	0110
CCS=3	272	1100	1101	0011	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	11	11	00	0000
CD1=1	313	0011	1100	0000	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	11	11	0110
CD1=2	303	0000	0011	1111	1	0	1	1	1	0	0	1	1	0	1	1	0	1	0	0	0	10	10	00	1101
CD1=3	374	0011	0011	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	11	10	11	1111
CD1=4	314	0000	0101	0000	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	01	11	00	1111
CD1=5	372	0011	1101	0101	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	11	11	00	1111
CD2=1	312	0010	0000	0110	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	11	11	11	1111
CD2=2	337	0011	0100	0101	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	11	11	00	1111
CE1=1	317	0011	1000	0000	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	11	11	11	0110
CE1=2	307	0010	1001	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	0	10	11	00	1111
CE1=3	326	0011	1101	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	11	10	11	1111
CE2=1	315	0000	0110	0110	0	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	11	11	11	1111
CE2=2	371	0011	0000	0101	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	11	11	00	1111
CL=1	311	0000	0010	1111	1	0	1	1	1	0	0	1	1	0	1	1	0	1	0	0	0	10	10	00	1101
CL=2	375	0000	1000	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	11	10	11	1111
CL=3	367	0011	1101	0101	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	11	11	00	1111
CS=1	100	0010	1101	0011	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	11	11	00	0000
CS=2	322	0010	1110	0000	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	11	11	11	1111
CS=3	321	1101	1111	0101	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	11	11	00	1100
D0=1	101	1001	0011	0000	1	0	1	1	1	0	0	1	0	0	1	1	1	1	1	0	1	11	11	11	0101
D0=2	157	1001	1101	0101	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	11	11	00	1010
D0=3	162	0010	0101	1111	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	11	11	11	0010
D0=3A	155	0010	0101	1111	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	11	11	11	0010
D0=4	332	1101	1111	0101	1	0	1	1	1	0	0	1	0	0	1	1	1	1	0	0	1	11	11	00	1100

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SP1	SP3	DIP	SM0	SP0	SM1	BBT	BAR	BTP	BPF	SP2	CKO	AB TS	AT NG	AR RG	BUT
D1=1	103	0111	1111	0000	1	0	1	1	1	0	0	0	0	0	0	1	1	0	0	0	10	11	11	1011
D1=2	200	0111	0111	0000	1	0	1	1	1	0	0	1	0	0	0	0	1	1	1	1	0	1	1 11	10 11	0011
D1=3	210	1001	1100	0101	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	1 1 11	11 00	1010
D1=4	163	0010	0011	1111	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1 1 11	11 11	0010
D1=5	334	1100	1010	0000	1	0	1	1	1	0	0	0	1	1	0	1	1	1	1	1	1	0	0 0 01	11 00	1111
D1=6	365	0011	1010	0101	1	0	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	0	1 1 11	11 00	1111
D2=1	105	0010	0110	0000	1	0	1	1	1	0	0	0	0	0	0	1	1	0	1	1	1	0	1 0 10	11 00	1111
D2=2	331	0001	1110	0110	0	1	1	1	1	0	0	1	0	0	0	1	0	1	1	1	1	0	1 1 11	11 11	1111
D2=3	341	0111	1111	0101	1	0	1	1	1	0	0	1	0	0	0	1	1	1	0	0	0	1	1 11	11 00	1011
D3=1	107	1000	1111	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	0	1	1	0	1 1 10	11 00	1111
D3=2	160	1100	0111	0110	0	1	1	1	1	0	0	1	0	0	0	1	0	1	1	1	1	0	1 1 11	11 11	1111
D3=3	070	1100	0110	0101	1	0	1	1	1	0	0	1	1	1	0	1	1	1	0	0	0	1	1 11	11 00	1111
D3=4	071	1100	0101	0000	1	0	1	1	1	0	0	1	0	0	0	0	1	1	1	1	0	1	1 11	10 11	1111
D3=5	072	0111	1111	0101	1	0	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	0 10	11 00	1011
D4=1	111	0001	1110	1001	0	0	1	1	1	0	0	0	0	0	1	0	0	1	1	0	0	1	0 10	11 11	0100
D5=1	113	1100	0111	1001	0	0	1	1	1	0	0	1	0	0	1	0	0	1	1	0	0	1	1 10	11 11	0100
D6=1	115	1100	0010	0000	1	0	1	1	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1 10	11 00	1111
D6=2	075	1100	0000	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1 11	11 11	1111
D6=3	077	1101	0000	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1 11	11 00	1111
D6=4	057	0011	1111	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1	1 11	10 11	1111
D6=5	300	0111	1111	0110	0	0	1	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	0 10	11 11	1011
D7=1	117	0011	0111	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1 10	11 00	1111
D7=2	310	1011	1011	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1 11	11 11	1111
D7=3	104	0010	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1 11	11 00	1111
D7=4	320	1011	1001	0000	1	0	1	1	1	0	0	1	0	0	0	0	1	1	1	1	0	1	1 11	10 11	1111
D7=5	106	1100	0110	0110	0	0	1	1	1	0	0	1	0	0	0	1	1	1	0	1	0	1	1 10	11 00	1111
DB0=1	156	1001	1011	0101	1	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1 11	11 11	1010
DB0=2	164	0011	1011	1111	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1 11	11 11	0010
DB0=3	304	1101	1111	0101	1	0	1	1	1	0	0	1	0	0	1	1	1	1	0	0	1	1	1 11	01 00	1100
DBE=1	110	1101	1110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 00	1111
DE=1	250	1000	1100	0101	1	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1 11	11 11	1010
DO=1	270	1010	1100	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 10	1111
DO=10	165	0001	1101	1111	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1 11	11 11	0010
DO=11	342	1010	0010	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 01	1111
DO=12	135	1010	0001	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 01	1111
DO=13	136	1010	0000	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 01	1111
DO=14	137	1001	1111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 01	1111
DO=15	140	1001	1110	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 01	1111
DO=16	141	1001	1101	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 01	1111
DO=17	142	1001	1100	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	1 11	11 01	1111

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SP1	SP3	DIP	SMØ	SP1	SM1	BBT	BAR	BTP	SPF	SP2	CKO	ABT	TNS	ALG	BRG	BUT
DO-18	143	1100	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	0	0	01	11	01	1111
DO-2	123	1010	1011	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-3	124	1010	1010	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-4	125	1010	1001	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-5	126	1010	1000	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-6	127	1010	0111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-7	130	1010	0110	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-8	131	1010	0101	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-9	132	1001	1010	0101	1	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	11	11	1010
ERT-1	010	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	11	10	1101
ERT1A	046	1111	1100	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	11	10	1101
ERT1B	153	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	11	10	1101
ET-1	011	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1101
ET-10	254	0101	0010	0000	1	0	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	10	11	00	0000
ET-11	255	0101	0001	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	11	11	1111
ET-12	256	0101	0000	0110	0	1	1	1	1	1	1	1	1	0	1	0	0	1	1	0	0	1	10	11	11	1111
ET-13	257	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1	11	11	11	1111
ET-2	245	0101	1001	0101	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	11	00	1111
ET-3	246	0101	1000	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	0100
ET-5	247	0110	1001	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	01	11	00	1111
ET-6	226	0101	0110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	00	00	1111
ET-7	251	0101	0101	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	0100
ET-8	252	0101	0100	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	0	01	11	00	1111
ET-9	253	0101	0011	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	11	11	00	1111
ET2-2	003	1111	1011	0101	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	11	11	11	1111
ET2-3	004	1110	0001	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	1111
ET2-5	036	1110	0000	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	0	01	11	00	1111
ET2-6	037	1101	0110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	00	00	1111
ET2-7	051	0101	0101	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	1111
F-1	062	1101	0100	0000	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	11	11	10	1111
F-2	053	0000	1010	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	11	11	11	1111
F-3	365	0000	1011	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	11	11	00	1111
F-4	364	1100	1110	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	11	10	11	0000
F-5	061	1111	1110	0101	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	0	1	11	11	11	0111
H-1	041	0011	1101	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	11	11	11	1111
H-2	302	0011	1111	0000	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	11	11	00	0110
INT-1	325	0101	1001	0000	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	11	00	1000
IT-1	273	0101	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	11	10	11	1101
J1-1	204	0100	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1111
J1-2	260	1101	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	11	00	1100

NAM	LDC	NXT	ALU	CRI	FSH	AUX	PSW	SP1	SP3	DIP	SMO	SP0	SM1	BBT	BAR	BTP	SPF	S2	CKD	ATB	TNS	ALG	BRG	BUT
J2=1	212	0100	1110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	00	1111
J2=1A	261	0100	1101	0101	1	0	1	1	1	0	1	1	1	1	1	1	0	0	1	1	11	11	00	1111
J2=2	262	0111	0011	1001	0	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	11	11	11	0100
J2=3	214	0111	1001	0101	1	0	1	1	1	1	0	1	1	0	1	1	0	1	0	1	01	11	00	1111
J2=4	206	0111	0001	0000	1	0	1	1	1	0	0	1	1	0	0	1	1	0	1	1	11	11	00	1111
J2=5	216	0100	1100	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	11	11	00	1111
J2=6	263	0100	1011	0101	1	0	1	1	1	0	0	1	1	0	0	1	1	0	1	1	11	11	00	1111
J2=7	264	0100	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	11	11	1111
J2=8	265	1101	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	11	11	00	1100
LC=1	042	0101	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	10	11	1101
MB=0	154	0101	1111	0000	1	0	1	0	1	0	0	1	1	0	1	1	1	0	1	1	11	11	00	1111
MB=1	240	1001	0101	1111	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	1	11	11	11	1111
MB=2	152	1101	1111	0101	1	0	1	1	1	0	0	1	1	0	0	0	1	1	1	1	11	11	00	1100
PF=1	043	0101	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	10	11	1101
RI=1	005	0110	1110	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	11	11	00	1111
RI=2	221	0110	1101	0110	0	1	1	1	1	1	0	1	1	0	1	0	1	1	1	1	11	11	11	1111
RI=3	222	0110	1100	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	11	11	00	1111
RI=4	223	0110	1011	0000	1	0	1	1	1	0	0	1	0	0	1	1	1	1	0	1	11	11	11	1111
RI=5	224	0110	1010	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	0	11	11	00	1111
RI=6	225	0010	0101	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	0	1	11	10	11	1111
R2=1	227	0110	0111	0000	1	0	1	1	1	1	0	1	1	0	1	1	0	1	1	1	10	11	00	1111
R2=2	230	0110	0110	0110	0	1	1	1	1	1	0	1	0	1	0	1	1	1	1	1	11	11	11	1111
R2=3	231	0110	0101	0101	1	0	1	1	1	0	1	1	0	1	1	1	1	0	1	0	11	11	00	1111
R2=4	232	0110	0011	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	11	11	00	1111
R2=6	234	0110	0010	0000	1	0	1	1	1	1	0	1	1	0	1	1	0	1	1	1	10	11	00	1111
R2=7	235	0110	0001	0110	0	1	1	1	1	1	0	1	0	1	0	1	1	1	1	1	11	11	11	1111
R2=8	236	0110	0000	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	0	11	11	00	1111
R2=9	237	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	11	10	00	1111
RS=1	000	0101	1110	0000	1	0	1	1	1	0	1	1	1	0	1	1	0	1	1	0	10	10	00	1101
RS=1A	241	0001	1000	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	11	11	00	1111
RS=2	347	1100	0011	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	11	11	00	1111
RS=3	074	0001	0110	0110	0	1	1	1	1	0	1	1	1	0	1	0	0	1	1	0	10	10	00	1101
RS=4	351	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	11	11	00	1111
RST=1	357	0011	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	11	11	00	1110
RT=1	001	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	11	10	11	1101
S0=1	201	1111	1000	0000	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	1	11	11	11	0011
S0=2	007	1111	1110	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	0	0	1	11	11	00	1001
S1=1	203	0101	1011	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	10	11	00	1111
S1=2	244	1111	1000	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	11	10	11	0011
S2=1	205	0011	1110	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	10	11	00	1111

MAM	LOC	NXT	ALU	CRY IHX	FSU	AUX	PSW	SPP1	SSP3	DIP	SMB T	SPM0	SM01	BBT	BAT RP	SPP FP	SP ?2	CKR OT	ATN S	AIG	BRG	BUT
S2=2	101	1111	0011	0110	0	1	1	1	1	0	0	1	1	0	0	0	1	1	1	1	1	1111
S2=3	014	0101	1011	0101	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	1	1111
S3=1	207	1111	0001	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	1	1111
S3=2	016	1111	0000	0110	0	1	1	1	1	0	0	1	1	0	0	0	1	1	1	0	1	1111
S3=3	017	1010	0011	0101	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	1	1111
S3=4	134	0100	0011	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1111
S3=5	274	0101	1011	0101	1	0	1	1	1	0	0	1	1	0	1	1	0	1	1	0	0	1111
S4=1	211	1111	0011	1001	0	0	1	1	1	0	0	1	1	0	0	0	0	1	1	0	1	0100
S5=1	213	1111	0000	1001	0	0	1	1	1	0	0	1	1	0	0	0	0	1	1	0	1	0100
S6=1	215	1110	1010	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1111
S6=2	025	1110	1001	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1111
S6=3	026	1110	1000	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1111
S6=4	027	1110	0111	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1111
S6=5	030	0101	1011	0110	0	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	0	1111
S7=1	217	1110	0101	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1111
S7=2	032	1110	0100	0110	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1111
S7=3	033	1110	0011	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1111
S7=4	034	1110	0010	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1111
S7=5	035	1010	0011	0110	0	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	0	1111
SB1=1	166	1000	0101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB1=2	172	1000	0100	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB1=3	173	1000	0011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB1=4	174	1001	1011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB1=5	144	1000	0001	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB1=6	176	1000	0000	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB1=7	177	1111	1001	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB1=8	006	1001	0010	1110	0	0	0	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=1	167	1111	0101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=2	012	0110	1111	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=3	220	1110	1101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=4	022	1110	1100	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=5	023	1110	1011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=6	024	1110	0110	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=7	031	0010	0111	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB2=8	330	1000	1100	1110	0	0	0	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1111
SBE=1	047	1111	1110	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	0	0	0	1	1001
SB0=1	067	0001	1001	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB0=2	346	0010	1011	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB0=3	124	0001	1111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111
SB0=4	340	0000	1110	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1111

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	PP1	PP3	DIP	SMO	SP0	SM1	BBT	BAR	BTP	SPF	SP2	CKO	ATB	TNS	ALG	BRG	BUT
SBO=5	101	1101 0111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111
SBO=6	050	1110 1111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111
SBO=7	020	1101 0101	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111
SBO=8	052	1101 1000	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111
SC=1	116	1101 1111	0100	1	0	1	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1	11	00	00	1100
T=1	021	0101 1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	1	11	10	11	1101
U1=1	352	1000 1101	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	1	0	0	1	1	11	11	00	1111
U2=1	353	1000 1100	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	1	0	0	1	1	11	11	00	1111
U3=1	354	1000 1011	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	1	0	0	1	1	11	11	00	1111
U4=1	355	1000 1010	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	1	0	0	1	1	11	11	00	1111
U5=1	373	1000 1100	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	1	0	0	1	1	11	11	00	1111
URTR	064	0101 1010	0000	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	11	10	11	1101
URTX	060	0101 1010	0000	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	11	10	11	1101
W=1	063	1101 1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	00	1100

REV.	NUMBER	CODE	SIZE
	KD11-B-4	MP	K

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KD11-B		PARTS LIST		

DRN. J. Madden	DATE 4-21-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. R. L. Kinsel	DATE 5-2-72	
ENG. R. L. Kinsel	DATE 5-2-72	TITLE MICROPROGRAM CROSS REFFERENCE LISTING (KD11-B)
PROJ. ENG. R. L. Kinsel	DATE 5-2-72	
PROD. R A Peterson	DATE 5/2/72	
NEXT HIGHER ASSEMBLY B-DD-KD11-B		SIZE K CODE MP NUMBER KD11-B-4 REV.
SCALE 11		DIST.
SHEET 1 OF 3		

REVISIONS	REV.	CHANGE NO.	CHK

DEC FORM NO. DRB 109

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000 RS-1    001 RT-1    002 *****   003 ET2-2   004 ET2-3   005 R1-1    006 SB1-8   007 S0-2
010 ERT-1   011 ET-1    012 SB2-2   013 B2-2D   014 S2-3    015 B-1     016 S3-2    017 S3-3
020 SB0-7   021 T-1     022 SB2-4   023 SB2-5   024 SB2-6   025 S6-2    026 S6-3    027 S6-4
030 S6-5    031 SB2-7   032 S7-2    033 S7-3    034 S7-4    035 S7-5    036 ET2-5   037 ET2-6
040 BG-1    041 W-1     042 LC-1    043 PF-1    044 *****   045 BT-1    046 ERT1A   047 SBE-1
050 SB0-6   051 ET2-7   052 SB0-8   053 F-2     054 *****   055 *****   056 *****   057 D6-4
060 URTX    061 F-5     062 F-1     063 W-1     064 URTR    065 D1-6    066 *****   067 SB0-1
070 D3-3    071 D3-4    072 D3-5    073 *****   074 RS-3    075 D6-2    076 *****   077 D6-3
100 CS-1    101 D0-1    102 *****   103 D1-1    104 D7-3    105 D2-1    106 D7-5    107 D3-1
110 DBE-1   111 D4-1    112 CC-1    113 D5-1    114 *****   115 D6-1    116 SC-1    117 D7-1
120 *****   121 *****   122 *****   123 D0-2    124 D0-3    125 D0-4    126 D0-5    127 D0-6
130 D0-7    131 D0-8    132 D0-9    133 *****   134 S3-4    135 D0-12   136 D0-13   137 D0-14
140 D0-15   141 D0-16   142 D0-17   143 D0-18   144 SB1-5   145 A145    146 B-3     147 B-2
150 *****   151 CCM-1   152 MB-2    153 ERT1B   154 MB-0    155 D0-3A   156 DB0-1   157 D0-2
160 D3-2    161 *****   162 D0-3    163 D1-4    164 DB0-2   165 D0-10   166 SB1-1   167 SB2-1
170 *****   171 *****   172 SB1-2   173 SB1-3   174 SB1-4   175 *****   176 SB1-6   177 SB1-7
200 D1-2    201 S0-1    202 *****   203 S1-1    204 J1-1    205 S2-1    206 J2-4    207 S3-1
210 D1-3    211 S4-1    212 J2-1    213 S5-1    214 J2-3    215 S6-1    216 J2-5    217 S7-1
220 SB2-3   221 R1-2    222 R1-3    223 R1-4    224 R1-5    225 R1-6    226 ET-6    227 R2-1
230 R2-2    231 R2-3    232 R2-4    233 *****   234 R2-6    235 R2-7    236 R2-8    237 R2-9
240 MB-1    241 RS-1A   242 *****   243 *****   244 S1-2    245 ET-2    246 ET-3    247 ET-5
250 DE-1    251 ET-7    252 ET-8    253 ET-9    254 ET-10   255 ET-11   256 ET-12   257 ET-13
260 J1-2    261 J2-1A   262 J2-2    263 J2-6    264 J2-7    265 J2-8    266 *****   267 *****
270 D0-1    271 *****   272 CCS-3   273 IT-1    274 S3-5    275 *****   276 CCS-2   277 *****
300 D6-5    301 S2-2    302 W-2     303 CD1-2   304 DB0-3   305 B2-2    306 *****   307 CE1-2
310 D7-2    311 CL-1    312 CD2-1   313 CD1-1   314 CD1-4   315 CE2-1   316 CCS-1   317 CE1-1
320 D7-4    321 CS-3    322 CS-2    323 *****   324 SB0-3   325 INT-1   326 CE1-3   327 *****
330 SB2-8   331 D2-2    332 D0-4    333 B2-2A   334 D1-5    335 B2-2B   336 *****   337 CD2-2
340 SB0-4   341 D2-3    342 D0-11   343 B2-2C   344 *****   345 *****   346 SB0-2   347 RS-2
350 CCM-2   351 RS-4    352 U1-1    353 U2-1    354 U3-1    355 U4-1    356 *****   357 RST-1
360 *****   361 SB0-5   362 *****   363 *****   364 F-4     365 F-3     366 *****   367 CL-3
370 *****   371 CE2-2   372 CD1-5   373 U5-1    374 CD1-3   375 CL-2    376 *****   377 *****
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A145  145        D6-1  115        F-4   364        S5-1  213
B-1   015        D6-2  075        F-5   061        S6-1  215
B-2   147        D6-3  077        W-1   041        S6-2  025
B-3   146        D6-4  057        W-2   302        S6-3  026
B2-2  305        D6-5  300        INT-1 325        S6-4  027
B2-2A 333        D7-1  117        IT-1  273        S6-5  030
B2-2B 335        D7-2  310        J1-1  204        S7-1  217
B2-2C 343        D7-3  104        J1-2  260        S7-2  032
B2-2D 013        D7-4  320        J2-1  212        S7-3  033
BG-1  040        D7-5  106        J2-1A 261        S7-4  034
BT-1  045        DB0-1 156        J2-2  262        S7-5  035
CC-1  112        DB0-2 164        J2-3  214        SB1-1 166
CCM-1 151        DB0-3 324        J2-4  206        SB1-2 172
CCM-2 350        DBE-1 110        J2-5  216        SB1-3 173
CCS-1 316        DE-1  250        J2-6  263        SB1-4 174
CCS-2 276        D0-1  270        J2-7  264        SB1-5 144
CCS-3 272        D0-10 165        J2-8  265        SB1-6 176
CD1-1 313        D0-11 342        LC-1  042        SB1-7 177
CD1-2 303        D0-12 135        MB-0  154        SB1-8 006
CD1-3 374        D0-13 136        MB-1  240        SB2-1 167
CD1-4 314        D0-14 137        MB-2  152        SB2-2 012
CD1-5 372        D0-15 140        PF-1  043        SB2-3 220
CD2-1 312        D0-16 141        R1-1  005        SB2-4 022
CD2-2 337        D0-17 142        R1-2  221        SB2-5 023
CE1-1 317        D0-18 143        R1-3  222        SB2-6 024
CE1-2 307        D0-2  123        R1-4  223        SB2-7 031
CE1-3 326        D0-3  124        R1-5  224        SB2-8 330
CE2-1 315        D0-4  125        R1-6  225        SBE-1 047
CE2-2 371        D0-5  126        R2-1  227        SB0-1 067
CL-1  311        D0-6  127        R2-2  230        SB0-2 346
CL-2  375        D0-7  130        R2-3  231        SB0-3 324
CL-3  367        D0-8  131        R2-4  232        SB0-4 340
CS-1  100        D0-9  132        R2-6  234        SB0-5 361
CS-2  322        ERT-1 010        R2-7  235        SB0-6 050
CS-3  321        ERT1A 046        R2-8  236        SB0-7 020
D0-1  101        ERT1B 153        R2-9  237        SB0-8 052
D0-2  157        ET-1  011        RS-1  000        SC-1  116
D0-3  162        ET-10 254        RS-1A 241        T-1   021
D0-3A 155        ET-11 255        RS-2  347        U1-1  352
D0-4  332        ET-12 256        RS-3  074        U2-1  353
D1-1  103        ET-13 257        RS-4  351        U3-1  354
D1-2  200        ET-2  245        RST-1 357        U4-1  355
D1-3  210        ET-3  246        RT-1  001        U5-1  373
D1-4  163        ET-5  247        S0-1  201        URTR  064
D1-5  334        ET-6  226        S0-2  007        URTX  060
D1-6  065        ET-7  251        S1-1  203        W-1   063
D2-1  105        ET-8  252        S1-2  244
D2-2  331        ET-9  253        S2-1  205
D2-3  341        ET2-2 003        S2-2  301
D3-1  107        ET2-3 004        S2-3  214
D3-2  160        ET2-5 036        S3-1  207
D3-3  070        ET2-6 037        S3-2  216
D3-4  071        ET2-7 051        S3-3  217
D3-5  072        F-1   062        S3-4  134
D4-1  111        F-2   053        S3-5  274
D5-1  113        F-3   365        S4-1  211
```

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1	J K L M N P R	
2	J K L M N N N	
3	J J J M N N P	
4	J J J M N N P	
5	J J J M M M N	
6	J J J M M M M	
7	J J J M M N N	
8	J J J M N N N	
9	J J J M M N P	
10	J K L M M N P	
11	J J J M M M N	
12	- - - M M N N	

DATE	ENG.	ETCH REV.	ECO NO.
10-11-72	M.T.	B	00007
10-30-72	B.A.	B	00008
11-27-72	M.T.	B	00009
2-23-73	B.A.	C	000106 10A
6-19-73	M.T.	C	00012
8-20-75	R.K	C	00014
12NOV76	R.G.	C	00015

FIRST USED ON OPTION/MODEL

KD11-B

DRN. B J Ware	DATE 10-16-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. M. T. Tellam	DATE 10/26/72	
ENG. M T Tellam	DATE 10/26/72	TITLE: DATA PATHS
PROJ. ENG. M T Tellam	DATE	
PROD.	DATE	

NEXT HIGHER ASSY. B-DD-KD11-B

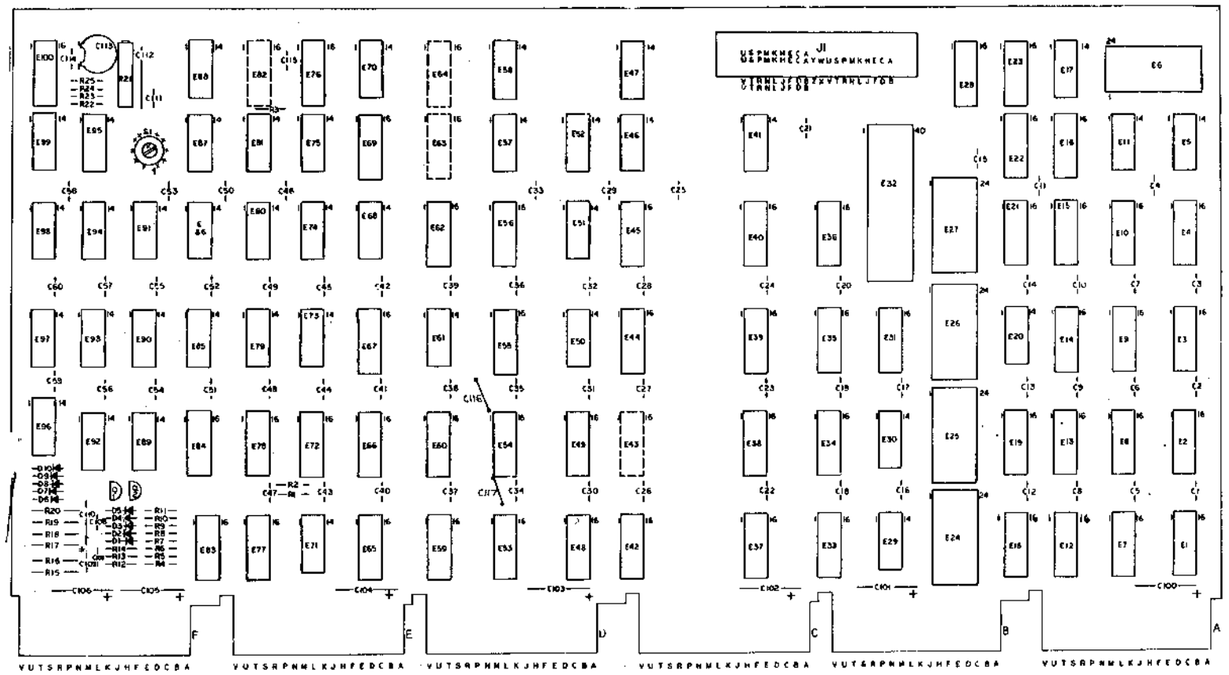
SCALE +-+

SHEET 1 OF 12

SIZE	CODE	NUMBER	REV.
B	CS	M7260-0-1	R

DIST.

NOTES:



DEC 74174	8	16
DEC 74175	8	16
DEC 7489	8	16
DEC 1808	3	1
DEC 74182	8	16
DEC 74181	12	24
DEC 74157	8	16
DEC 74S158	8	16
DEC 74153	8	16
DEC 74194	8	16
DEC 74150	12	24
DEC 8838	8	16
IC TYPE	GND	+ 5V

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

IC PIN LOCATIONS

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

FIRST USED ON OPTION MODEL

PARTS LIST

ETCH BOARD REV C

REV	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRAWN 12/2/73
CHK'D 12/2/73
PROJ ENGR 12/3/73
ENGR 12/3/73
NEXT HIGHER ASSY B-DD-KD11-B
SCALE
SHEET 2 OF 12

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DATA PATHS

SIZE D | CODE CS | NUMBER M7260-0-1 | REV N

DIST

DRAWING 40-622 16499

DEC FORM NO. DRD-195A

NOTES:

REF				
REF		ETCH CIRCUIT BOARD		1
REF		X-Y COORDINATE HOLE/LAYOUT	M7260-0-4	2
REF		DATA PATH ASSY HOLE/LAYOUT	M7260-0-5	3
REF		MODULE ECO HISTORY	M7260-0-6	4
63	C1-60,106,109,111	CAP .01 MFD,100V, 20% DISC	1001610	5
1	C110	CAP .47 MFD, 35V, 10%	1005965	6
3	C107,114,116	CAP 1000.0 MMF, 100V 5%	1000042	7
1	C113	CAP 4700 MMF, 100V, 5%	1002895	8
1	C112	CAP 39 MFD, 10V 10%	1000076	9
7	C100-106	CAP 6.8 MFD, 35V, 10%	1005306	10
1	C115	CAP 120.0 MMF, 100V, 5%	1000018	11
10	D1-10	DIODE D864	1100114	12
4	E1-4	IC DEC 8838	1911117	13
2	E5,11	IC DEC 7430	1905576	14
1	E6	IC DEC 74150	1910153	15
8	E7-10,33-36	IC DEC 8266	1909934	16
4	E12-15	IC DEC 74194	1910623	17
3	E16,22,28	IC DEC 74153	1909937	18
5	E17,75,79,85,91	IC DEC 7402	1909004	19
3	E18,19,21	IC DEC 74S158	1910549	20
7	E20,29,57,74,86,98,99	IC DEC 7400	1905575	21
2	E23,62	IC DEC 74157	1910655	22
4	E24-27	IC DEC 74181	1909982	23
2	E30,89	IC DEC 7437	1910081	24
1	E31	IC DEC 74182	1910019	25
1	E32	IC DEC 1808 UART	1910459	26
4	E37-40	IC DEC 7489	1910396	27
9	E41,46,50,51,70,71,73,80,81	IC DEC 7438	1911219-01	28
4	E42,45,60,84	IC RES NETWORK	1311003-02	29
1	E47	IC DEC 7408	1910155	30
3	E48,55,56	IC DEC 74175	1910651	31
2	E49,67	IC DEC 74174	1910652	32
1	E44	IC ROM (CONSTANTS)	23A01A1	33
5	E52,86,90,93,97	IC DEC 7474	1905547	34
1	E53	IC ROM (DOP AUX)	23A02A1	35
1	E54	IC ROM (SOP AUX #1)	23A03A1	36
2	E58,87	IC DEC 7404	1909688	37
1	E59	IC ROM (DOP IR)	23A05A1	38
1	E61	IC DEC 7410	1905576	39
1	E65	IC ROM (CC OR OP)	23A04A1	40
1	E66	IC ROM (SOP AUX #2)	23A06A1	41
1	E68	IC DEC 7486	1910011	42
1	E69	IC ROM (C + V - BIT)	23A12A1	43
1	E72	IC ROM (BRANCH)	23A03A2	44
2	E76,100	IC DEC 9602	1910951	45
1	E77	IC ROM (ENB UNARY)	23A10A1	46
1	E78	IC ROM (NOT DOP)	23A08A1	47
1	E83	IC ROM (ODD BYTE EQ 0)	23A11A1	48
2	E88,95	IC DEC 74197	1910035	49
1	E92	IC DEC 7413	1909989	50
1	E94	IC DEC 7473	1905587	51

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	J1	CONNECTOR, BERG	1209941	52
1	R5	RES 1.5K 1/4W 5%	1300391	53
2	R13,14	RES 470 1/4W 5%	1300316	54
2	R19,20	RES 12K 1/2W 5%	1300487	55
2	R15,18	RES 1.5K 1/2W 5%	1300394	56
1	R22	RES 10 1/4W 5%	1301317	57
2	R3,25	RES 30K 1/4W 5%	1302384	58
1	R10	RES 150 1/4W 5%	1300250	59
1	R17	RES 68 1/2W 10%	1300220	60
1	R2	RES 2K 1/4W 5%	1302388	61
1	R21	RES 20K 3/4W 10% POT	1309143-11	62
6	R1,6-9,23	RES 1K 1/4W 5%	1300365	63
1	R4	RES 750 1/4W 5%	1301401	64
1	R12	RES 82 1/4W 5%	1301477	65
1	R16	RES 560 1/2W 5%	1300339	66
2	R11,24	RES 10K 1/4W 5%	1300479	67
2	Q1,2	TRANS DEC 6534D PNP	1503409	68
12		EYELETS	9006732	69
1		MODULE HANDLE	1210711-2	70
1	S1	SWITCH,ROT 1 POLE 10 POSITION DRY	1210042-1	71
1		HEXNUT NYLON	9007992	72
1	C117	CAP 120MMF 100V 5%	1000021	73

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

QTY	REF DESIGNATION	DESCRIPTION	PART NO	ITEM NO.

PARTS LIST

IC TYPE	GND	+ 5V
DEC 9602	8	16
ROM 23AXXA1	8	16
ROM 23AXXA2	8	16
DEC 7473	4	11
DEC 9602	8	16

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

IC PIN LOCATIONS

FIRST USED ON OPTION MODEL: 11/05

ETCH BOARD REV: C

REV.	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.

REVISIONS

SEMICONDUCTOR CONVERSION CHART

		DATE
DRN		11/6/73
CHK'D		11/6/73
ENGR		11/6/73
PROJ. ENGR		11/6/73
PROD.		11/6/73

NEXT HIGHER ASSY: B-DD-KD11-B

SCALE: —

SHEET 3 OF 12

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS

SIZE D | CODE CS | NUMBER M7260-0-1 | REV. C

DIST.

SIZE D | CODE CS | M7260-0-1 | REV. C | SHEET 1

DEC FORM NO 6R0 1358

BRUNING 40-522-16499

EXTA SWITCH REG Ø3 H
EXTA SWITCH REG Ø2 H
EXTA SWITCH REG Ø1 H
EXTA SWITCH REG ØØ H

CONG SP WRITE H
CONE ALLOW CONST ANTS L
CONG ENAB SWITCH REG L
CONJ PROC CLOCK H
DPA SP WRITE H
DPA SP WRITE L
DPA ENAB SWITCH REG H

DPE NEG (1) H
DPE ZERO (1) H
DPE VBIT (1) H
CONG ENAB PSW H
DPE COUT (1) H
CONG ENAB SPR L
DPA SP WRITE L
DPA AMUX Ø3 H
DPA AMUX Ø2 H
DPA AMUX Ø1 H
DPA AMUX ØØ H
CONB SPA Ø3 H
CONB SPA Ø2 H
CONB SPA Ø1 H
CONB SPA ØØ H

DPB BREG Ø3 (1) H
CONG BMODE ØØ H
CONG BMODE Ø1 H
DPA AMUX Ø3 H
DPA AMUX Ø2 H
DPA AMUX Ø1 H
DPA AMUX ØØ H
+3V E42 15
DPA PROC CLOCK L
DPE SERIAL SHIFT H
CONB INH 1/1 L
CONG BBOT H

DPA BLEG Ø3 L
DPA BLEG Ø2 L
DPA BLEG Ø1 L
DPA BLEG ØØ L

DPA ALEG Ø3 L
DPA ALEG Ø2 L
DPA ALEG Ø1 L
DPA ALEG ØØ L

CONF CIN H
DPF COP L
DPE COUT (1) L
DPA ALU CIN Ø1 H
DPA ALU CIN ØØ H
DPA Ø-7=Ø H

DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU SØ H
CONF ALU MODE H
DPA ALU CIN ØØ H

BUS DØ3 L
BUS DØ2 L
BUS DØ1 L
BUS DØØ L

CONG DAT ENAB L
CONA ENAB ALU H EQ2

DPA AMUX Ø3 H
DPA AMUX Ø2 H
DPA AMUX Ø1 H
DPA AMUX ØØ H

CONF ALU S3 L
CONF ALU S2 L
CONF ALU S1 L
CONF ALU SØ L
CONJ PROC CLOCK H
C117 220 MMF

DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU SØ H
DPA PROC CLOCK L

8266 SWITCH REG MUX

S1	SØ	Fn
L	L	BN
L	H	AN
H	L	BN
H	H	Ø

745158

E	S	Fn
H	—	Fn = Ø
L	L	Fn = An
L	H	Fn = Bn

74194

S1	SØ	Fn
L	L	HOLD
L	H	SR
H	L	SL
H	H	LOAD

DATA PATH <03:007>

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. M. Rivera DATE 12/27/72
CHK. DATE
ENG. DATE
PROJ. ENG. DATE
PROD. DATE

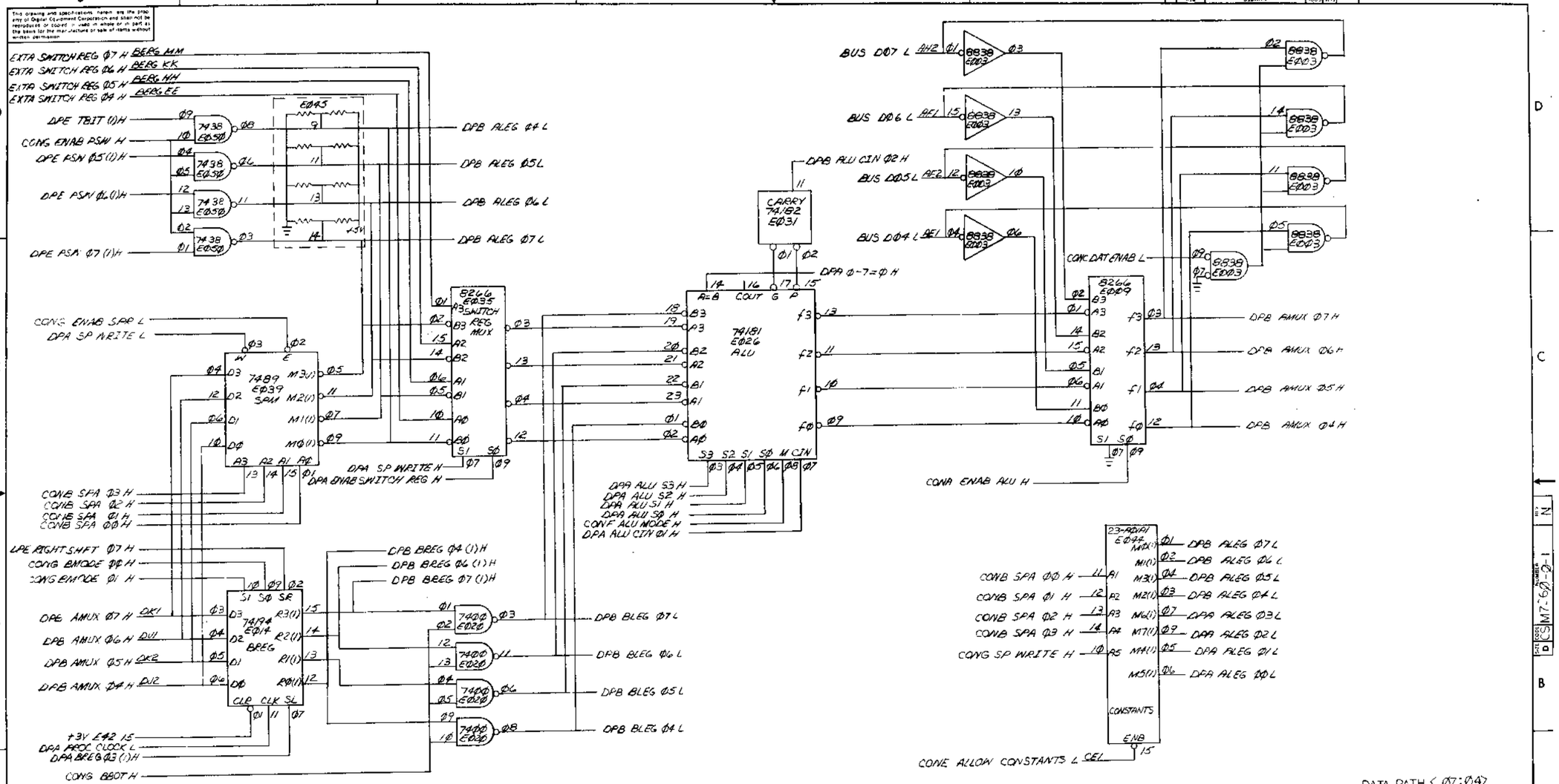
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATH (DPA)

NEXT HIGHER ASSY: B-DD-KD11-B
SIZE D | CODE CS | NUMBER M7260-Ø-1 | REV. P
SCALE
SHEET 4 OF 12
DIST.

REVISIONS | REV. | CHANGE NO | CHK.

DRAWING 45-522 1980
DEC FORM NO
DRD 109-B



DATA PATH ⟨Ø7:Ø4⟩

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .006, XX ± .02, X ± .1 — ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

	NAME	DATE
DRN	Jim Burns	12/5/72
CHK D		2/23/73
ENG		2/23/73
MFG ENG		2/23/73
PROD		2/23/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPB)

NEXT HIGHER ASSY: B-DD-KD11-B

SIZE	CODE	NUMBER	REV
D	CS	M726Ø-Ø-1	N

SCALE — SHEET 5 OF 12 — DIST

REVISIONS	REV
CHANGE NO	
CHK	

DRAWING 40-322 15640 — DEC-D-DRV-NO DRD 102-B

M726Ø-Ø-1 N CS D

EXTA SWITCH REG 11 H BERG K
EXTA SWITCH REG 10 H BERG H
EXTA SWITCH REG 09 H BERG E
EXTA SWITCH REG 08 H BERG C

E042 +5V
DPC AREG 11 L
DPC AREG 10 L
DPC AREG 09 L
DPC AREG 08 L

CARRY 74182 E031
DPC ALU CIN 03 H
DPC B-15=0 H

BUS D11 L
BUS D10 L
BUS D09 L
BUS D08 L
8838 E002

CONC DAT ENAB L
8266 E028
DPC AMUX 11 H
DPC AMUX 10 H
DPC AMUX 09 H
DPC AMUX 08 H

CONG ENAB SPL L C.F2
DPA SP WRITE L
7489 E038 SPAM
CONB SPA 03 H
CONB SPA 02 H
CONE SPA 01 H
CONE SPA 00 H

8266 E034 SWITCH REG MUX
DPA SP WRITE H
DPA ENAB SWITCH REG H

74181 E025 ALU
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU S0 H
CONF ALU MODE H
DPB ALU CIN 02 H
CONA ENAB ALU H

DPD BREG 12 (1) H
CONG BMODE 00 H
CONG BMODE 01 H
DPC AMUX 11 H CK1
DPC AMUX 10 H CK2
DPC AMUX 09 H CK1
DPC AMUX 08 H CK2
+3V E42 15
DPA PROC CLOCK L
DPB BREG 07 (1) H
DPA +1 H
CONG BTOP H CLZ

7416 E019 BREG
DPC BREG 08 (1) H
DPC BREG 11 (1) H

74S158 E019 BLEG MUX
DPC BLEG 11 L
DPC BLEG 10 L
DPC BLEG 09 L
DPC BLEG 08 L

E043 CONSTANTS
CONB SPA 00 H
CONB SPA 01 H
CONE SPA 02 H
CONB SPA 03 H
CONG SP WRITE H
DPD ALEG 15 L
DPD ALEG 14 L
DPC ALEG 13 L
DPC ALEG 12 L
DPC ALEG 11 L
DPC ALEG 10 L
DPC ALEG 09 L
DPC ALEG 08 L
CONE ALLOW CONSTANTS L

DATA PATH <11:08>

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 X ± .1 ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN Jay Fraser DATE 12/20/72
CHK D. DATE 1/2/73
ENG DATE 1/2/73
PROJ ENG DATE 1/2/73
PROD DATE 1/2/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
DATA PATHS
(DPC)

NEXT HIGHER ASSY
B-DD-KD11-B

SIZE	CODE	NUMBER	REV
D	CS	M7260-0-1	M

SCALE
SHEET 6 OF 12
DIST

REV	REVISIONS	CHANGE NO	CHK

BRUNING 40-522 (1840)
DEC FORM NO DRD 102-B

BUS DI5 L AM2
BUS DI4 L AL1
BUS DI3 L AL2
BUS DI2 L AK1
EXTA SWITCH REG 15 H BERG U
EXTA SWITCH REG 14 H BERG S
EXTA SWITCH REG 13 H BERG P
EXTA SWITCH REG 12 H BERG M
CONG ENAB SPL L
CPA SP WRITE L
DPD ALEG 15 L
DPD ALEG 14 L
DPD ALEG 13 L
DPD ALEG 12 L
DPD AL15 L
DRC B-15=0 H
CONC DAT ENABL
DPD AMUX 15 H
DPD AMUX 14 H
DPD AMUX 13 H
DPD AMUX 12 H
CONA ENAB ALU H
COMB SPA 03 H
COMB SPA 02 H
COMB SPA 01 H
COMB SPA 00 H
DPE SERIAL SHIFT H
CONG BMODE 00 H
CONG BMODE 01 H
DPD AMUX 15 H CH1
DPD AMUX 14 H CH2
DPD AMUX 13 H CH3
DPD AMUX 12 H CH4
DPD BLEG 15 L
DPD BLEG 14 L
DPD BLEG 13 H
DPD BLEG 12 H
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU S0 H
CONF ALU MODE H
DRC ALU CIN 03 H
+3V E42 15
DPA PROC CLOCK L
DPA BREG 11 (1) H
DPB BREG 07 (1) H
DPA +1 H
CONG BBOT H
DPA SP WRITE H
DPA ENAB SWITCH REG H
DPD BREG 15 (1) H
DPD BREG 14 (1) H
DPD BREG 12 (1) H

DATA PATH <15:12>

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1 — ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN Tom Pepe DATE 11/6/78
CHK'D DATE 12/13/78
ENG. DATE 12/13/78
PROJ. ENG. DATE 12/13/78
PROD DATE 12/13/78

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (CPD)

NEXT HIGHER ASSY: B-DD-KD11-B
SCALE —
SHEET 7 OF

SIZE	CODE	NUMBER	REV
D	CS	M7260-0-1	N

DIST

REVISIONS | REV | CHANGE NO | CHK

DRAWING AD 322-15840

DEC FORM NO DRD 107-B

DPE NEG H
DPA AMUX Φ3 H
DPE SET Z H
DPA AMUX Φ2 H
DPF SET V H
DPA AMUX Φ1 H
DPF SET COUT H
DPA AMUX ΦΦ H
74157 EØ62 CC MUX
DPE NEG (1) H
DPE ZERO (1) H
DPE VBIT (1) H
74175 EØ56
CONF AUX CONTROL L
CONJ LOAD PSW L
CONJ PROC CLOCK H
DMZ
+3V E45 21
DPF C CLK L
CONN PROC INIT L
DLZ
DPE COUT (1)H
DPE COUT (Φ)H
DPA BLEG ΦΦ L
DPA BREG ΦΦ (1)H
DPD BLEG 15 L
DPD BREG 15 (1)H
DPA ALUS1 H
DPA ALUSΦ H
DPE L SHIFT SIGN H
DPE ROT NEG H
DPE SERIAL SHIFT H
DPE ROT COUT H
DPB AMUX Φ7 H
DPD AMUX 15 H
DPA Φ-7=Φ H
DPE Φ-15=Φ H
DPG BYTE H
DPF ROTATE H
DPE NEG H
DPE SET Z H
DPD BLEG 14 L
DPD BLEG 13 L
DPD BLEG 12 L
DPC BLEG 11 L
DPC BLEG 1Φ L
DPC BLEG Φ9 L
DPC BLEG Φ8 L
DPB BLEG Φ7 L
DPB BLEG Φ6 L
DPB BLEG Φ5 L
DPB BLEG Φ4 L
DPA BLEG Φ3 L
DPA BLEG Φ2 L
DPA BLEG Φ1 L
DPA BLEG ΦΦ L
74153 ROT MUX 2 EØ22
74153 ROT CC MUX EØ28
74153 ROT MUX EØ16
74ΦΦ EØ57
74Φ2 EØ17
74Φ3 EØ05
74Φ4 EØ39
74Φ2 EØ75
74Φ2 EØ74
74Φ1 EØ79
74Φ2 EØ52 DEL
74Φ2 EØ23 BYTE MUX
74175 EØ56 PSW 7:4
7437 EØ89
S1 SΦ FUNCTION
L L ROR
L H ASR
H L ROL
H H ASL
DPC BREG Φ8 H
DPE SERIAL SHIFT H
DPD BREG 14 (1)H
DPB BREG Φ6 (1)H
DPE RIGHT SHFT Φ7 H
DPE L SHIFT SIGN H
CONF AUX BYTE H DN2
74157 EØ23 BYTE MUX
74153 EØ28 CONSOLE MUX
DPD BLEG 15 L
DPD BLEG 14 L
DPD BLEG 13 L
DPD BLEG 12 L
DPC BLEG 11 L
DPC BLEG 1Φ L
DPC BLEG Φ9 L
DPC BLEG Φ8 L
DPB BLEG Φ7 L
DPB BLEG Φ6 L
DPB BLEG Φ5 L
DPB BLEG Φ4 L
DPA BLEG Φ3 L
DPA BLEG Φ2 L
DPA BLEG Φ1 L
DPA BLEG ΦΦ L
BERG F
DPE DAK H
EXTA SCAN ADDRS Φ1 (1)H BERG N
EXTA SCAN ADDRS Φ2 (1)H BERG L
EXTA SCAN ADDRS Φ4 (1)H BERG J
EXTA SCAN ADDRS Φ8 (1)H BERG D
DPB AMUX Φ7 H
DPB AMUX Φ6 H
DPB AMUX Φ5 H
DPB AMUX Φ4 H
DPE PSW Φ7 (1)H
DPE PSW Φ7 (Φ)H
DPE PSW Φ6 (1)H
DPE PSW Φ6 (Φ)H
DPE PSW Φ5 (1)H
DPE PSW Φ5 (Φ)H
DPE TBIT (1)H
DD1
DC1
DD2
CONN PROC INIT L
DPF LOAD IR L
FS2
DPE T DEL (1)L
DPA PROC CLOCK L
CONJ LOAD PSW L
CONA ENAB ALU H
CON H PROC INIT H DM1
C116 1000 MMF
DPE PUP L
DPA Φ-7=Φ H
DPC 8-15=Φ H
DPE Φ-15=ΦH
PSW

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

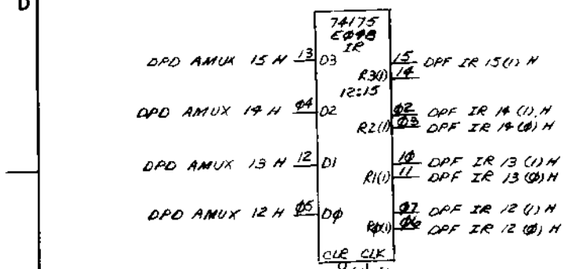
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, .XX ± .02, X ± .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓
MATERIAL
FINISH
DRN M.Rice DATE 11/1/76
CHK DATE
ENGR DATE
PROJ ENG DATE
APPD DATE

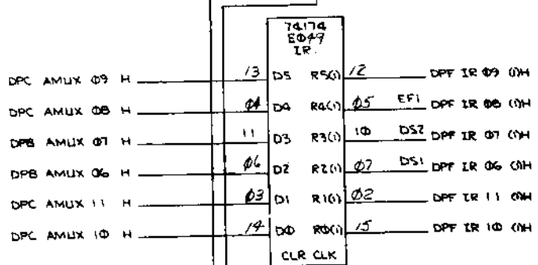
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

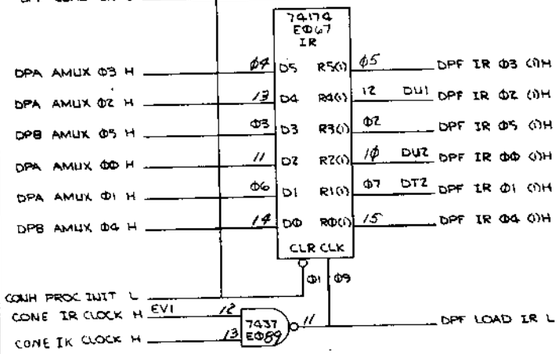
TITLE: DATA PATHS (DPE)
NEXT HIGHER ASSY: 8-DC-KD11-B
SCALE
SHEET 8 OF 12
SIZE D CODE DCS NUMBER M7260-0-1 REV N
DIST

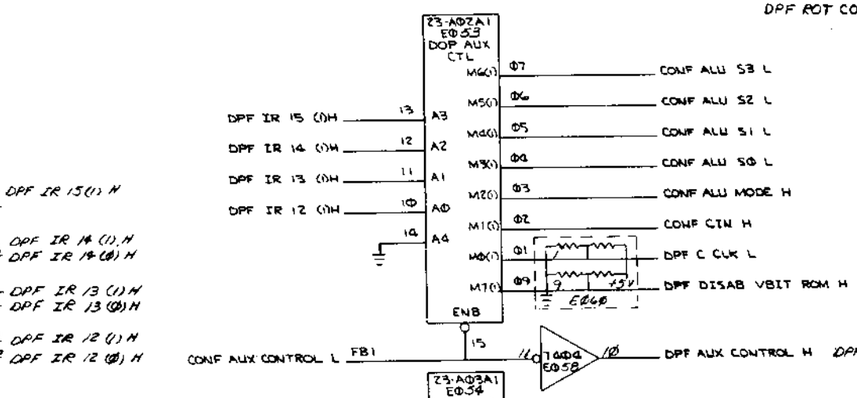
REVISIONS: REV | CHANGE NO | CHK

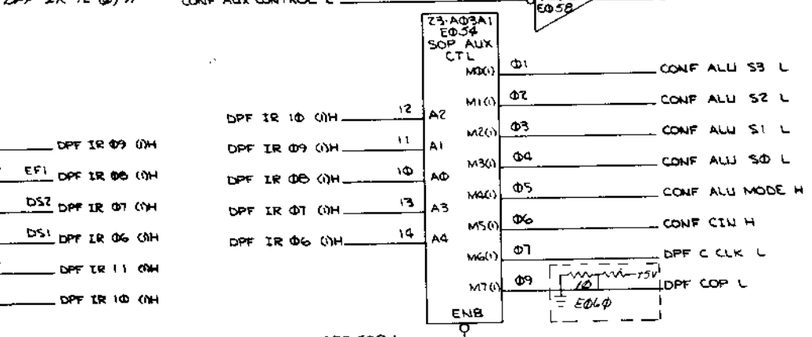
DEC FORM NO DRD 102-B

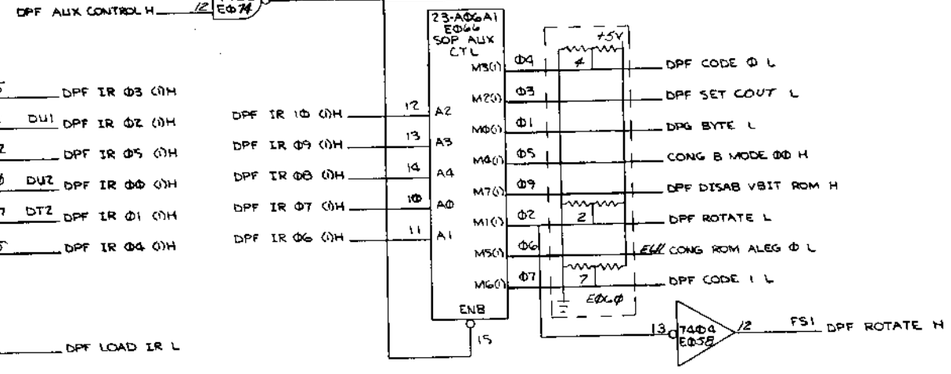


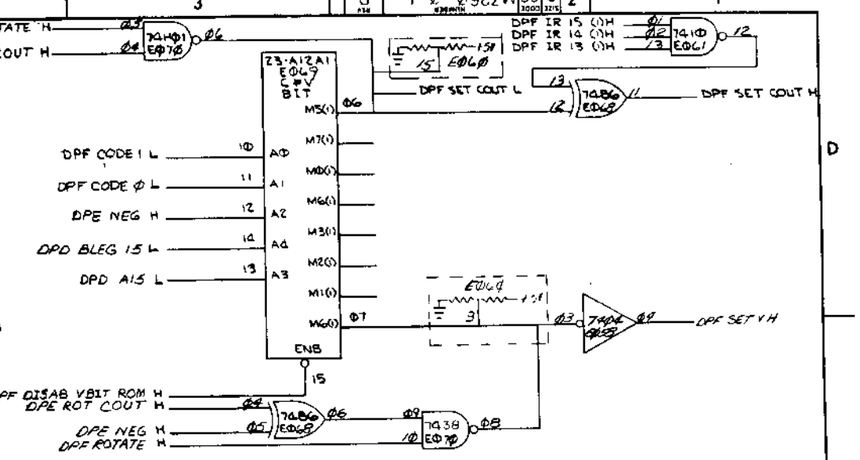












AUX ALU CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1 ANGLES ±Ø° 3Ø'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY
MATERIAL
FINISH

	NAME	DATE
DRN.	M. Pierce	11/7/74
CHK'D		2/23/73
ENGR		2/23/73
PROJ. ENG.		2/23/73
PROD.		2/23/73

NEXT HIGHER ASSY. B-DD-KD11-B
SCALE
SHEET 9 OF 12

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPF)

SIZE D | CODE CS | NUMBER M726Ø-Ø-1 | REV. P
DIST

REVISIONS	REV	CHANGE NO	CHK

DEC FORM NO DND 102-B

23-AØ5A1 EØ59

CONE BUT DESTINATION L DH1 — DPF IR 12 (1)H — DPF IR 13 (1)H — DPF IR 14 (1)H — DPF IR 15 (1)H

EØ64 +5V

DPG CAL SOURCE L
DPG MOVE L (EH1)
DPG BYTE L (EK1)
DPG CMP+BIT L
DPF CODE Ø L
CONF ALU SØ L
CONF ALU S2 L
DPG DIS ALU S BITS H (EJ1)

23-AØ3A2 EØ72

DPF IR 15 (1)H — DPF IR 1Ø (1)H — DPF IR Ø8 (1)H — DPF IR Ø9 (1)H — DPE NEG (1)H — DPE ZERO (1)H — DPE VBIT (1)H — DPE COUT (1)H

CONF MPC Ø4 L
CONF MPC Ø3 L
CONF MPC Ø2 L
CONF MPC Ø1 L

CONE BUT IR DECODE L
DPG CAL BRANCH L

23-A1Ø1A1 EØ77

CONE JMP OR JSR L EMZ — DPG SWAB L — DPG JMP L — DPG JMPORJSR L — DPG CAL DEST L

CONF MPC ØØ L (EL1)
CONF MPC Ø7 L (ES1)
CONF PRE AUX L (FJ1)
CONF MPC Ø5 L (EB1)
CONF MPC Ø4 L (EC1)
CONF MPC Ø3 L (ED1)
CONF MPC Ø2 L (ER1)
CONF MPC Ø1 L (EP1)

CONE ENAB UNARY L EN1

23-AØ8A1 EØ65

DPF IR Ø2 (1)H — DPF IR Ø1 (1)H — DPF IR ØØ (1)H — CONE BUT IR DECODE L DV2 — DPG CC L

EØ60 +5V

DPG WAIT L (DV1)
CONF MPC Ø7 L
CONF MPC Ø6 L
CONF MPC Ø5 L
CONF MPC Ø4 L
CONF MPC Ø3 L
CONF MPC Ø2 L
CONF MPC Ø1 L

23-AØ8A1 EØ78

DPF IR 15 (1)H — DPF IR Ø8 (1)H — DPF IR Ø9 (1)H — DPF IR 1Ø (1)H — DPF IR 11 (1)H

EØ69 +5V

DPG EMT L (FU2)
DPG TRAP L (FU1)
DPG CAL DEST L (EM1)
DPG JMP OR JSR L
DPG CAL BRANCH L
DPG ODD BYTE=Ø L
DPG S4 L

2K 1K +5V
EØ84

CONE BUT DESTINATION H EE1

74Ø8 EØ73 — DPF IR Ø3 (1)H — DPF IR Ø4 (1)H — DPF IR Ø5 (1)H — DPG CMP+BIT L — DPG JMP OR JSR L

Ø3 EA1 CONF MPC Ø6 L
CONF MPC Ø1 L
Ø6 CONF MPC Ø2 L
Ø8 CONF MPC Ø3 L
Ø8 FT2 DPG ENAB NOW MOD H

74Ø2 EØ85 — DPF IR Ø7 (1) H — DPF IR Ø6 (1) H

74Ø8 EØ74

74Ø4 EØ59 — DPG BYTE L — DPG BYTE H

23-A11A1 EØ83

DPF IR Ø3 (1)H — DPF IR Ø4 (1)H — DPF IR Ø5 (1)H — DPF IR Ø6 (1)H — DPF IR Ø7 (1)H

EØ84 +5V

DPG JMP L
DPG SWAB L
DPG CC L
DPG CC OR OPERATE L
DPG JMP OR JSR L
ESZ DPG RTS L
DPG CAL DEST L

DPG ODD BYTE=Ø L

74Ø2 EØ85 — DPG CAL SOURCE L — CONE BUT IR DECODE L

74Ø4 EØ59 — DPF IR Ø9 (1)H — DPF IR 1Ø (1)H — DPF IR 11 (1)H

74Ø8 EØ71

CONF MPC Ø7 L
CONF MPC Ø1 L
CONF MPC Ø2 L
CONF MPC Ø3 L

74Ø1Ø EØ41 — DPF IR 14(Ø) H — DPF IR 13(Ø) H — DPF IR 12(Ø) H

Ø6

IR DECODE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .Ø7, X ± .1 — ANGLES: ± Ø° 3Ø'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL — FINISH

DRN. M. Rizza 11/72 — CHK. — ENGR. — PROJ. — DATE

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPG)

NEXT HIGHER ASSY: B-DD-KD11-B
SCALE — SHEET 10 OF 12

SIZE D CODE CS NUMBER M726Ø-Ø-1 REV. P
DIST.

REVISIONS: REV. | CHANGE NO | CHK.

DEC FORM NO DRG 101-B

DPH RDR ENB (1) L
CONA ENAB DATA H
CONA CLR MSYN H FF2
DPH CLEAR BUFF L
+3V E84 12
DPH B INIT L
DPH TTY CLK (1) H
FS CLK DISAB L FH2
FS CLK L FH1
DPH SER IN H FH1
DPH SI -15 L EP1
FS SER IN H EM1
DPH MAINT (0) H
DPH MAINT (1) H
DPH SER Φ H
DPH TTL SERO L
DPH TTY CLK (1) H
DFB AMUX Φ7 H
DFB AMUX Φ6 H
DFB AMUX Φ5 H
DFB AMUX Φ4 H
DFB AMUX Φ3 H
DFB AMUX Φ2 H
DFB AMUX Φ1 H
DFB AMUX Φ0 H
CONA DATA STROBE L
-15V DC
COND INIT H
+3V E42 15
DPH START H
ED2 DPH TTY CLK H
UART E032
DFH BUSY (1) H
CONA ENAB RCD PSN H FE1
DPH TBMT H FD1
CONA ENAB XMIT PSN H
DPH RCD INT ENAB (1) H
DPH XMIT INT ENAB (1) H
LFH MAINT (1) H
DFH DATA AVAIL H
DFH TBMT H
CONA ENAB DATA H C111
DPC FLEG 11 L
DFA FLEG Φ7 L
DFB FLEG Φ6 L
DFB FLEG Φ5 L
DFB FLEG Φ4 L
DPA FLEG Φ3 L
DFA FLEG Φ2 L
DFA FLEG Φ1 L
DFA FLEG ΦΦ L
DFH SER Φ H
FE2 DFH SER Φ -15 L

SWITCH POSITION	BAUD RANGE 1	BAUD RANGE 2
1	2400 B	1760 B
2	1200 B	880 B
3	600 B	440 B
4	300 B	220 B
5	150 B	110 B
TTY CLK (1) H	26 μs	35.5 μs

FILTERED + 5 POWERS E100

SCL CONTROL

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± 1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE DUALITY ✓
MATERIAL —
FINISH —

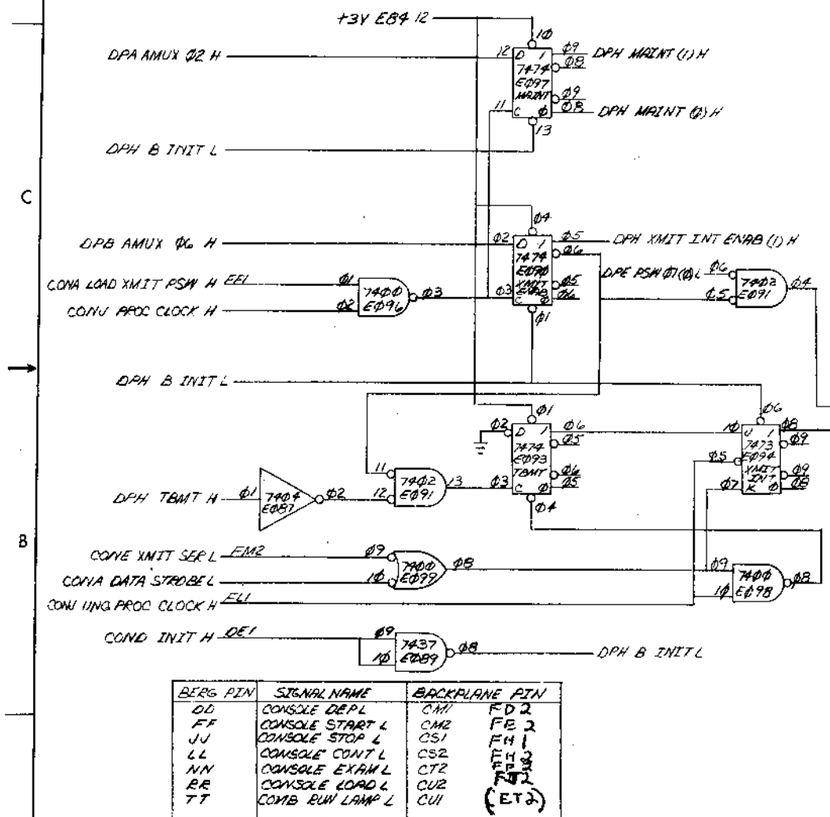
DRN [illegible] DATE 1/3/75
CHK [illegible] DATE 2/22/75
ENG [illegible] DATE 2/23/75
PROJ [illegible] DATE 2/25/75
PROG [illegible] DATE 2/24/75

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATH (DPH)

NEXT HIGHER ASSY: B-DD-KD11-8
SCALE —
SHEET 11 OF 12
SIZE D | CODE CS | NUMBER M7260-0-1 | REV N | DIST

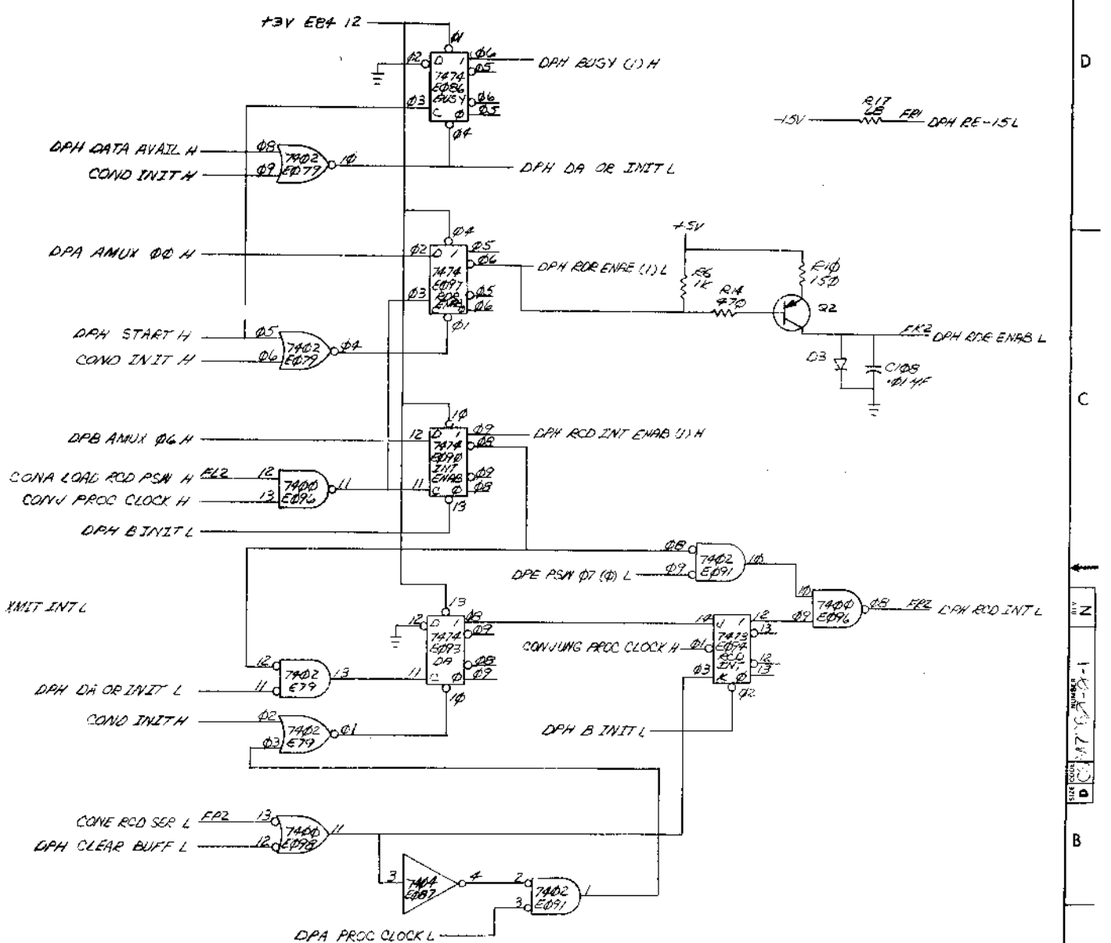
DRAWING NO 52-12840 REVISIONS REV CHANGE NO CHK
DEC 10MM NO ORD 102-B



BERG PIN	SIGNAL NAME	BACKPLANE PIN
DD	CONSOLE DEP L	CM1 FD2
FF	CONSOLE START L	CM2 FE2
JJ	CONSOLE STOP L	CS1 FH1
LL	CONSOLE CONT L	CS2 FH2
NN	CONSOLE EXAM L	CT2 FF2
RR	CONSOLE LOAD L	CU2 FD1
TT	CONB RUN LAMP L	CU1 (ET2)

PACE CONE

↑ console cont



SCE CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1; ANGLES: ± 6° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL / FINISH /

DRN Jim Reine DATE 11/29/72
CHK'D DATE 12/2/73
ENG. DATE 12/2/73
PROJ. ENG. DATE 12/24/73
PROD DATE 12/27/73
NEXT HIGHER ASSY B-DC-KC11-B
SCALE /
SHEET 12 OF 12

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATH (DPH1)

SIZE D | CODE CS | NUMBER M7280-0-1 | REV. N | DIST

BRUNING 40-522 15840 | REVISIONS | REV | CHANGE NO. | CHK

DEC FORM NO. DRD 107-B

THIS FACE SHEET CONTAINS THE FOLLOWING CHIP PART NUMBERS

PART NUMBER
23-A01A1
23-A02A1
23-A03A1
23-A04A1
23-A05A1
23-A06A1
23-A08A1
23-A10A1
23-A11A1
23-A12A1
23-A03A2

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KD11-B		PARTS LIST		

DRN. C. Tschner	DATE 5-8-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. H. T.	DATE	
ENG.	DATE	TITLE: DATA PATH ROM PATTERNS
PROJ. ENG.	DATE	
PROD.	DATE	
NEXT HIGHER ASSEMBLY: E-DD-KD11-B		SIZE K · CODE RL · NUMBER M726Ø-Ø-8 · REV.
SCALE		
SHEET 1 OF 15		DIST.

REVISIONS: REV. · CHANGE NO. · CHK

DEC FORM NO. DRB 109

```
                    /( *Y8 (PIN #9) DPA ALEG 02 L
                    */( *Y7 (PIN #7) DPA ALEG 03 L
                    **/( *Y6 (PIN #6) DPA ALEG 00 L
                    ***/( *Y5 (PIN #5) DPA ALEG 01 L
                    ****/( *Y4 (PIN #4) DPB ALEG 05 L
                    *****/( *Y3 (PIN #3) DBP ALEG 04 L
                    ******/( *Y2 (PIN #2) DPB ALEG 06 L
                    *******/( *Y1 (PIN #1) DPB ALEG 07 L
 OCTAL DECIMAL      ********      OCTAL
ADDRESS ADDRESS EDCBA ********     DATA
   000      0   00000 11111111     377
   001      1   00001 01001110     116     K=207 SWR ADDRESS I.E. 177570+000207,BAR
   002      2   00010 01110011     163     K=64 RECVR, VECTOR
   003      3   00011 00001111     017     K=360 CONDITION CODE MASK (COM=1)
   004      4   00100 10111011     273     K=30 EMT VECTOR
   005      5   00101 00111111     077     K=14 T BIT VECTOR
   006      6   00110 11111111     377
   007      7   00111 11111111     377
   010      8   01000 11111011     373     K=20 IOT VECTOR
   011      9   01001 00111011     073     K=34 TRAP VECTOR
   012     10   01010 11111111     377
   013     11   01011 11111111     377
   014     12   01100 10111111     277     K=10 RESERVED (ILLEGAL) INSTRUCTION VECTOR
   015     13   01101 01111111     177     K=4 BUS ERROR OR STACK OVERFLOW ERROR
   016     14   01110 11111111     377
   017     15   01111 11111111     377
   020     16   10000 01111011     173     K=24 PWR FAIL VECTOR
   021     17   10001 11111111     377
   022     18   10010 11111101     375     K=100 LCLK INT VECTOR
   023     19   10011 11111111     377
   024     20   10100 11111111     377
   025     21   10101 11111111     377
   026     22   10110 11111111     377
   027     23   10111 11111111     377
   030     24   11000 11111111     377
   031     25   11001 11111111     377
   032     26   11010 11111111     377
   033     27   11011 11111111     377
   034     28   11100 11111111     377
   035     29   11101 11110011     363     K=90 TRANSMIT VECTOR
   036     30   11110 11111111     377
   037     31   11111 11111111     377
                *****
                ****/( A(PIN #10) IS  CONG SP WRITE H
                ***/( B(PIN #11) IS  CONG ROM SPA 00 H
                **/( C(PIN #12) IS  CONG ROM SPA 01 H
                */( D(PIN #13) IS  CONG ROM SPA 02 H
                /( E(PIN #14) IS  CONG ROM SPA 03 H
```



```
                    /( *Y8 (PIN #9) DPF DISAB V BIT ROM H
                    */( *Y7 (PIN #7) CONF ALU S3 L
                    **/( *Y6 (PIN #6) CONF ALU S2 L
                    ***/( *Y5 (PIN #5) CONF ALU S1 L
                    ****/( *Y4 (PIN #4) CONF ALU S0 L
                    *****/( *Y3 (PIN #3) CONF ALU MODE H
                    ******/( *Y2 (PIN #2) CONF CIN H
                    *******/( *Y1 (PIN #1) DPF C CLK L
 OCTAL DECIMAL      ********      OCTAL
ADDRESS ADDRESS EDCBA ********     DATA
   000      0   00000 11111111     377
   001      1   00001 10000101     205     MOV F+A
   002      2   00010 01001010     112     CMP F+A MINUS B MINUS 1
   003      3   00011 10001101     215     BIT F+AB
   004      4   00100 10111101     275     BIC F+A,BARB
   005      5   00101 10100101     245     BIS F+A+B
   006      6   00110 00110000     060     ADD F+A PLUS B
   007      7   00111 11111111     377     RI (RESERVED INSTRUCTION)
   010      8   01000 11111111     377     RI
   011      9   01001 10000101     205     MOV(B)
   012     10   01010 01001010     112     CMP(B)
   013     11   01011 10001101     215     BIT(B)
   014     12   01100 10111101     275     BIC(B)
   015     13   01101 10100101     245     BIS(B)
   016     14   01110 00110010     062     SUB F+A PLUS B
   017     15   01111 11111111     377     RI
   020     16   10000 00000000     000     NOT ACCESSED
   021     17   10001 00000000     000     MOV - NOT ACCESSED
   022     18   10010 00000000     000     CMP - NOT ACCESSED
   023     19   10011 00000000     000     BIT - NOT ACCESSED
   024     20   10100 00000000     000     BIC - NOT ACCESSED
   025     21   10101 00000000     000     BIS - NOT ACCESSED
   026     22   10110 00000000     000     ADD - NOT ACCESSED
   027     23   10111 00000000     000     RI - NOT ACCESSED
   030     24   11000 00000000     000     RI - NOT ACCESSED
   031     25   11001 00000000     000     MOV(B) - NOT ACCESSED
   032     26   11010 00000000     000     CMP(B) - NOT ACCESSED
   033     27   11011 00000000     000     BIT(B) - NOT ACCESSED
   034     28   11100 00000000     000     BIC(B) - NOT ACCESSED
   035     29   11101 00000000     000     BIS(B) - NOT ACCESSED
   036     30   11110 00000000     000     SUB - NOT ACCESSED
   037     31   11111 00000000     000     RI - NOT ACCESSED
                *****
                ****/( A(PIN #10) IS  DPF IR 12 (1)H
                ***/( B(PIN #11) IS  DPF IR 13 (1)H
                **/( C(PIN #12) IS  DPF IR 14 (1)H
                */( D(PIN #13) IS  DPF IR 15 (1)H
                /( E(PIN #14) IS  DPA RUN GND L
```

```
                        /( *Y8 (PIN #9) DPF COP L
                        */( *Y7 (PIN #7) DPF C CLK L
                        **/( *Y6 (PIN #6) CONF CIN H
                        ***/( *Y5 (PIN #5) CONF ALU MODE H
                        ****/( *Y4 (PIN #4) CONF ALU S0 L
                        *****/( *Y3 (PIN #3) CONF ALU S1 L
                        ******/( *Y2 (PIN #2) CONF ALU S2 L
                        *******/( *Y1 (PIN #1) CONF ALU S3 L
                        ********          OCTAL
 OCTAL DECIMAL                            DATA
ADDRESS ADDRESS  EDCBA  ********
   000      0    00000  11111111          377
   001      1    00001  11111111          377
   002      2    00010  10011100          234      CLR ALUF=ZERO
   003      3    00011  10101001          251      NEG CIN ALUF=A MINUS B MINUS 1
   004      4    00100  10111111          277      ROR
   005      5    00101  11111111          377
   006      6    00110  11111111          377
   007      7    00111  11111111          377
   010      8    01000  11111111          377
   011      9    01001  11111111          377
   012     10    01010  11100000          340      INC CIN ALUF=A ARITH
   013     11    01011  00101111          057      SBC CIN ALUF=A MINUS 1
   014     12    01100  10110111          267      ASR
   015     13    01101  11111111          377
   016     14    01110  11111111          377
   017     15    01111  11111111          377
   020     16    10000  11111111          377
   021     17    10001  11111111          377
   022     18    10010  10010101          225      COM ALUF=NOT B
   023     19    10011  00000000          000      ADC CIN ALUF=A ARITH
   024     20    10100  10111011          273      ROL
   025     21    10101  11111111          377
   026     22    10110  11111111          377
   027     23    10111  11111111          377
   030     24    11000  10011010          232      SWAB NOT B CLOCK LOW
   031     25    11001  11111111          377
   032     26    11010  11001111          317      DEC CIN ALUF=A MINUS 1
   033     27    11011  10010000          220      TST ALUF=AL
   034     28    11100  10110011          263      ASL
   035     29    11101  11111111          377
   036     30    11110  11111111          377
   037     31    11111  11111111          377
                        *****
                        ****/( A(PIN #10) IS  DPF IR 08 (1)H
                        ***/( B(PIN #11) IS  DPF IR 09 (1)H
                        **/( C(PIN #12) IS  DPF IR 10 (1)H
                        */( D(PIN #13) IS  DPF IR 07 (1)H
                        /( E(PIN #14) IS  DPF IR 06 (1)H
```



```
                        /( *Y8 (PIN #9) DPG WAIT L
                        */( *Y7 (PIN #7) CONF MPC 07 L
                        **/( *Y6 (PIN #6) CONF MPC 06 L
                        ***/( *Y5 (PIN #5) CONF MPC 05 L
                        ****/( *Y4 (PIN #4) CONF MPC 04 L
                        *****/( *Y3 (PIN #3) CONF MPC 03 L
                        ******/( *Y2 (PIN #2) CONF MPC 02 L
                        *******/( *Y1 (PIN #1) CONF MPC 01 L
                        ********          OCTAL
 OCTAL DECIMAL                            DATA
ADDRESS ADDRESS  EDCBA  ********
   000      0    00000  11001011          313      CC OPR
   001      1    00001  11001011          313      CC OPR
   002      2    00010  11001011          313      CC OPR
   003      3    00011  11001011          313      CC OPR
   004      4    00100  11001011          313      CC OPR
   005      5    00101  11001011          313      CC OPR
   006      6    00110  11001011          313      CC OPR
   007      7    00111  11001011          313      CC OPR
   010      8    01000  11111111          377      RI (RESERVED INSTRUCTION)
   011      9    01001  11111111          377      NOT ACCESSED FOR NOT IR DECODE
   012     10    01010  11111111          377      RI
   013     11    01011  11111111          377      RI
   014     12    01100  11111111          377      RI
   015     13    01101  11111111          377      RI
   016     14    01110  11111111          377      RI
   017     15    01111  11111111          377      RI
   020     16    10000  11101111          357      HALT,BUT IR DEC
   021     17    10001  01100110          146      WAIT,BUT IR DEC
   022     18    10010  10100010          242      IOT
   023     19    10011  10001000          210      RESET
   024     20    10100  10110100          264      RTI
   025     21    10101  11101101          355      BREAKPOINT TRAP DECODE
   026     22    10110  11111111          377      RI
   027     23    10111  11111111          377      RI
   030     24    11000  11111111          377      RI
   031     25    11001  01111111          177      WAIT,BUT IR DEC,BAR
   032     26    11010  11111111          377      RI
   033     27    11011  11111111          377      RI
   034     28    11100  11111111          377      RI
   035     29    11101  11111111          377      RI
   036     30    11110  11111111          377      RI
   037     31    11111  11111111          377      RI
                        *****
                        ****/( A(PIN #10) IS  DPF IR 00 (1)H
                        ***/( B(PIN #11) IS  DPF IR 02 (1)H
                        **/( C(PIN #12) IS  DPF IR 01 (1)H
                        */( D(PIN #13) IS  DONE BUT IR DECODE L
                        /( E(PIN #14) IS  DPG CC L
```

```
                        /( *Y8 (PIN #9) DPF CODE 0 L
                        */( *Y7 (PIN #7) DPG MOVE L
                        **/( *Y6 (PIN #6) DPG DIS ALU S BITS H
                        ***/( *Y5 (PIN #5) DPG CMP OR BIT L
                        ****/( *Y4 (PIN #4) DPG BYTE L
                        *****/( *Y3 (PIN #3) DPG CAL SOURCE L
                        ******/( *Y2 (PIN #2) CONF ALU S0 L
                        *******/( *Y1 (PIN #1) CONF ALU S2 L
  OCTAL DECIMAL         ********        OCTAL
ADDRESS ADDRESS  EDCBA  ********        DATA
   000      0   00000   11011111        337     BR/CC (BRANCH OR CC OPERATOR)
   001      1   00001   11011111        337     BR/CC
   002      2   00010   11011011        333     BIC
   003      3   00011   11010011        323     BIC(B)
   004      4   00100   11001011        313     CMP
   005      5   00101   11000011        303     CMP(B)
   006      6   00110   01011011        133     ADD
   007      7   00111   01111000        170     SUB DIS ALU BITS H
   010      8   01000   10011011        233     MOV
   011      9   01001   10010011        223     MOV(B)
   012     10   01010   11011011        333     BIS
   013     11   01011   11010011        323     BIS(B)
   014     12   01100   11001011        313     BIT
   015     13   01101   11000011        303     BIT(B)
   016     14   01110   11011111        337     RI TRAP
   017     15   01111   11011111        337     RI TRAP
   020     16   10000   11011111        337     BR/CC
   021     17   10001   11011111        337     BR/CC
   022     18   10010   11011011        333     BIC
   023     19   10011   11010011        323     BIC(B)
   024     20   10100   11001011        313     CMP
   025     21   10101   11000011        303     CMP(B)
   026     22   10110   01011011        133     ADD
   027     23   10111   01011011        133     ADD
   030     24   11000   10011011        233     MOV
   031     25   11001   10010011        223     MOV(B)
   032     26   11010   11011011        333     BIS
   033     27   11011   11010011        323     BIS(B)
   034     28   11100   11001011        313     BIT
   035     29   11101   11000011        303     BIT(B)
   036     30   11110   11011111        337     RI TRAP
   037     31   11111   11011111        337     RI TRAP
                *****
                ****/( A(PIN #10) IS  DPF IR 15 (1)H
                ***/( B(PIN #11) IS  DPF IR 14 (1)H
                **/( C(PIN #12) IS  DPF IR 13 (1)H
                */( D(PIN #13) IS  DPF IR 12 (1)H
                /( E(PIN #14) IS  CONF BUT DESTINATION L
```



```
                        /( *Y8 (PIN #9) DPF DISAB V BIT ROM H
                        */( *Y7 (PIN #7) DPF CODE 1 L
                        **/( *Y6 (PIN #6) CONG ROM ALEG 0 L
                        ***/( *Y5 (PIN #5) CONG B MODE 00 H
                        ****/( *Y4 (PIN #4) DPF CODE 0 L
                        *****/( *Y3 (PIN #3) DPF SET CARRY L
                        ******/( *Y2 (PIN #2) DPF ROTATE L
                        *******/( *Y1 (PIN #1) DPG BYTE L
  OCTAL DECIMAL         ********        OCTAL
ADDRESS ADDRESS  EDCBA  ********        DATA
   000      0   00000   11111111        377
   001      1   00001   11111111        377
   002      2   00010   11111111        377
   003      3   00011   10110110        266     SWAB DISAB V BIT ROM
   004      4   00100   11110101        365     ROR
   005      5   00101   11110101        365     ASR
   006      6   00110   11100101        345     ROL
   007      7   00111   11100101        345     ASL
   010      8   01000   10110111        267     CLR
   011      9   01001   00110111        067     INC
   012     10   01010   11110011        363     COM
   013     11   01011   00111111        077     DEC
   014     12   01100   00000001        001     BCC
   015     13   01101   11111111        377
   016     14   01110   11111111        377
   017     15   01111   11111111        377
   020     16   10000   00000001        001     BMI
   021     17   10001   11111111        377
   022     18   10010   11111111        377
   023     19   10011   11111111        377
   024     20   10100   00000001        001     BVS
   025     21   10101   11111111        377
   026     22   10110   11111111        377
   027     23   10111   11111111        377
   030     24   11000   01011111        137     NEG
   031     25   11001   00111111        077     SBC
   032     26   11010   00110111        067     ADC
   033     27   11011   11110111        367     TST
   034     28   11100   11111111        377
   035     29   11101   11111111        377
   036     30   11110   11111111        377
   037     31   11111   11111111        377
                *****
                ****/( A(PIN #10) IS  DPF IR 07 (1)H
                ***/( B(PIN #11) IS  DPF IR 06 (1)H
                **/( C(PIN #12) IS  DPF IR 10 (1)H
                */( D(PIN #13) IS  DPF IR 09 (1)H
                /( E(PIN #14) IS  DPF IR 08 (1)H
```

```
                        /( *Y8 (PIN #9) DPG ODD BYTE *  0L
                        +/( *Y7 (PIN #7) DPG 54 L
                        ++/( *Y6 (PIN #6) DPG BYTE L
                        +++/( *Y5 (PIN #5) DPG EMT L
                        ++++/( *Y4 (PIN #4) DPG TRAP L
                        +++++/( *Y3 (PIN #3) DPG CAL BRANCH L
                        ++++++/( *Y2 (PIN #2) DPG JSR L
                        +++++++/( *Y1 (PIN #1) DPG CAL DEST L
  OCTAL  DECIMAL        ++++++++        OCTAL
 ADDRESS ADDRESS EDCBA  ++++++++        DATA
   000      0   00000   01111111        177
   001      1   00001   11111011        373     BPL
   002      2   00010   11111011        373     BGE
   003      3   00011   11111011        373     BVC
   004      4   00100   11111011        373     BNE
   005      5   00101   11111011        373     BHI
   006      6   00110   11111011        373     BGT
   007      7   00111   11111011        373     BCC
   010      8   01000   11111011        373     BR
   011      9   01001   11111011        373     BMI
   012     10   01010   11111011        373     BLT
   013     11   01011   11111011        373     BVS
   014     12   01100   11111011        373     BEQ
   015     13   01101   11111011        373     BLOS
   016     14   01110   11111011        373     BLE
   017     15   01111   11111011        373     BCS
   020     16   10000   11111100        374     JSR
   021     17   10001   11101111        357     EMT
   022     18   10010   11111110        376     SOP (CC) ROR/ROL/ASR/ASL
   023     19   10011   11011110        336     OPR (DST) ROR(B)/ROL(B)/ASR(B)/ASL(B)
   024     20   10100   11111110        376     SOP (CC) CLR/COM/INC/DEC
   025     21   10101   11011110        336     OPR(DST) CLR(B)/COM(B)/INC(B)/DEC(B)
   026     22   10110   11111111        377     RI RESERVED INST
   027     23   10111   11111111        377     RI RESERVED INST
   030     24   11000   11111100        374     JSR
   031     25   11001   11110111        367     TRAP
   032     26   11010   11111111        377     RI RESERVED INST
   033     27   11011   11111111        377     RI RESERVED INST
   034     28   11100   10111110        276     SOP NEG/ADC/SBC/TST
   035     29   11101   10011110        236     OPR(DST) NEG(B)/ADC(B)/SBC(B)/TST(B)
   036     30   11110   11111111        377     RI RESERVED INST
   037     31   11111   11111111        377     RI RESERVED INST
                        +++++
                        ++++/( A(PIN #10) IS  OPF IR 13 (1)H
                        +++/( B(PIN #11) IS  OPF IR 10 (1)H
                        ++/( C(PIN #12) IS  OPF IR 09 (1)H
                        +/( D(PIN #13) IS  OPF IR 08 (1)H
                        /( E(PIN #14) IS  OPF IR 11 (1)H
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                        /( *Y8 (PIN #9) CONF MPC 00 L
                        +/( *Y7 (PIN #7) CONF MPC 01 L
                        ++/( *Y6 (PIN #6) CONF MPC 02 L
                        +++/( *Y5 (PIN #5) CONF MPC 03 L
                        ++++/( *Y4 (PIN #4) CONF MPC 04 L
                        +++++/( *Y3 (PIN #3) CONF MPC 05 L
                        ++++++/( *Y2 (PIN #2) CONG CKOFF L
                        +++++++/( *Y1 (PIN #1) CONF MPC 07 L
  OCTAL  DECIMAL        ++++++++        OCTAL
 ADDRESS ADDRESS EDCBA  ++++++++        DATA
   000      0   00000   11111111        377
   001      1   00001   11111111        377
   002      2   00010   11111111        377
   003      3   00011   11111111        377
   004      4   00100   11111111        377
   005      5   00101   11111111        377
   006      6   00110   11111111        377
   007      7   00111   11111111        377
   010      8   01000   11011111        337     JMP BADR TO J=1 *204
   011      9   01001   11111111        377
   012     10   01010   11011111        337     JMP BADR TO J=1 *204
   013     11   01011   11111111        377
   014     12   01100   10101111        257     JSR BADR TO J2=1 * 212
   015     13   01101   11111111        377
   016     14   01110   11111111        377     NOT JMP OR JSR FALL THRU TO D1=2 * 200
   017     15   01111   11111111        377
   020     16   10000   11111111        377
   021     17   10001   11111111        377
   022     18   10010   11111111        377
   023     19   10011   11111111        377
   024     20   10100   11111111        377
   025     21   10101   11111111        377
   026     22   10110   11010111        327     SWAB BADR 024 INOR NEXT
   027     23   10111   11111111        377
   030     24   11000   01101111        157     JMP BADR 011 INOR NEXT
   031     25   11001   11111111        377
   032     26   11010   01101111        157     JMP BADR 011 INOR NEXT
   033     27   11011   11111111        377
   034     28   11100   01101111        157     JSR BADR 011 INOR NEXT
   035     29   11101   11111111        377
   036     30   11110   11101110        356     SOP BADR 210 INOR NXT
   037     31   11111   11110101        365     UNARY AND NOT JMP,JSR,SWAB
                        +++++
                        ++++/( A(PIN #10) IS  DPG CAL DEST L
                        +++/( B(PIN #11) IS  DPG JMP L OR JSR L
                        ++/( C(PIN #12) IS  DPG JMP L
                        +/( D(PIN #13) IS  DPG SWAB L
                        /( E(PIN #14) IS  CONG JMP OR JSR L
```

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                        /( #Y8 (PIN #9) DPG CC OR OPERATE L
                        */( #Y7 (PIN #7) DPG RTS L
                        **/( #Y6 (PIN #6) DPG CAL DEST L
                        ***/( #Y5 (PIN #5)
                        ****/( #Y4 (PIN #4) DPG CC L
                        *****/( #Y3 (PIN #3) DPG JMP L OR JSR L
                        ******/( #Y2 (PIN #2) DPG SWAB L
                        *******/( #Y1 (PIN #1) DPG JMP L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDC8A         ********        DATA
    000       0   00000   01111111        177     OPR(HALT/WAIT/RTI/BK/IOT/TR)
    001       1   00001   11111111        377     RI
    002       2   00010   11111111        377     RI
    003       3   00011   11111111        377     RI
    004       4   00100   11111111        377     RI
    005       5   00101   11111111        377     RI
    006       6   00110   11111111        377     RI
    007       7   00111   11111111        377     RI
    010       8   01000   11011010        332     JMP MODE 0
    011       9   01001   11011010        332     JMP MODE 4
    012      10   01010   11011010        332     JMP MODE 2
    013      11   01011   11011010        332     JMP MODE 6
    014      12   01100   11011010        332     JMP MODE 1
    015      13   01101   11011010        332     JMP MODE 5
    016      14   01110   11011010        332     JMP MODE 3
    017      15   01111   11011010        332     JMP *ODE 7
    020      16   10000   10111111        277     RTS NOT DPG CC OR OPR L
    021      17   10001   01110111        167     CC OPR 240
    022      18   10010   11111111        377     RI
    023      19   10011   01110111        167     CC OPR 260
    024      20   10100   11111111        377     RI
    025      21   10101   01110111        167     CC OPR 240
    026      22   10110   11111111        377     RI
    027      23   10111   01110111        167     CC OPR 260
    030      24   11000   11011101        335     SWAB MODE 0
    031      25   11001   11011101        335     SWAB MODE 4
    032      26   11010   11011101        335     SWAB MODE 2
    033      27   11011   11011101        335     SWAB MODE 6
    034      28   11100   11011101        335     SWAB MODE 1
    035      29   11101   11011101        335     SWAB MODE 5
    036      30   11110   11011101        335     SWAB MODE 3
    037      31   11111   11011101        335     SWAB MODE 7
                         *****
                        ****/( A(PIN #10) IS  DPF IR 05 (1)H
                        ***/( B(PIN #11) IS  DPF IR 04 (1)H
                        **/( C(PIN #12) IS  DPF IR 03 (1)H
                        */( D(PIN #13) IS  DPF IR 06 (1)H
                        /( E(PIN #14) IS  DPF IR 07 (1)H
```



```
                        /( #Y8 (PIN #9)
                        */( #Y7 (PIN #7) DPF SET V L
                        **/( #Y6 (PIN #6) DPF SET COUT L
                        ***/( #Y5 (PIN #5)
                        ****/( #Y4 (PIN #4)
                        *****/( #Y3 (PIN #3)
                        ******/( #Y2 (PIN #2)
                        *******/( #Y1 (PIN #1)
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDC8A         ********        DATA
    000       0   00000   11011111        337     INC OR ADC
    001       1   00001   10011111        237     ADD OR SUB
    002       2   00010   10111111        277     DEC OR SBC
    003       3   00011   11111111        377     CMP OR NEG
    004       4   00100   11111111        377     INC OR ADC
    005       5   00101   11011111        337     ADD OR SUB
    006       6   00110   11111111        377     DEC OR SBC
    007       7   00111   11011111        337     CMP OR NEG
    010       8   01000   11111111        377     INC OR ADC
    011       9   01001   11011111        337     ADD OR SUB
    012      10   01010   11111111        377     DEC OR SBC
    013      11   01011   11011111        337     CMP OR NEG
    014      12   01100   10111111        277     INC OR ADC
    015      13   01101   11111111        377     ADD OR SUB
    016      14   01110   11011111        337     DEC OR SBC
    017      15   01111   10011111        237     CMP OR NEG
    020      16   10000   11011111        337     INC OR ADC
    021      17   10001   11011111        337     ADD OR SUB
    022      18   10010   10111111        277     DEC OR SBC
    023      19   10011   10111111        277     CMP OR NEG
    024      20   10100   11111111        377     INC OR ADC
    025      21   10101   11111111        377     ADD OR SUB
    026      22   10110   11111111        377     DEC OR SBC
    027      23   10111   11111111        377     CMP OR NEG
    030      24   11000   11111111        377     INC OR ADC
    031      25   11001   11111111        377     ADD OR SUB
    032      26   11010   11111111        377     DEC OR SBC
    033      27   11011   11111111        377     CMP OR NEG
    034      28   11100   10111111        277     INC OR ADC
    035      29   11101   10111111        277     ADD OR SUB
    036      30   11110   11011111        337     DEC OR SBC
    037      31   11111   11011111        337     CMP OR NEG
                         *****
                        ****/( A(PIN #10) IS  DPF CODE 1 DEL (1)L
                        ***/( B(PIN #11) IS  DPF CODE 0 DEL (1)L
                        **/( C(PIN #12) IS  DPE NEG DEL (1)H
                        */( D(PIN #13) IS  DPD ALEG 15 DEL (1)L
                        /( E(PIN #14) IS  DPD BLEG 15 DEL (1)L
```

```
                                    /( #Y4 (PIN # 9) CONF MPC 03 L
                                    +/( #Y3 (PIN #10) CONF MPC 02 L
                                    ++/( #Y2 (PIN #11) CONF MPC 01 L
                                    +++/( #Y1 (PIN #12) CONF MPC 04 L
                                    ++++          OCTAL
  OCTAL DECIMAL                     ++++          DATA
ADDRESS ADDRESS    HGFEDCBA         1111          017
    000       0    00000000         1111          017
    001       1    00000001         1111          017
    002       2    00000010         1111          017
    003       3    00000011         1111          017
    004       4    00000100         1111          017
    005       5    00000101         1111          017
    006       6    00000110         1111          017
    007       7    00000111         1111          017
    010       8    00001000         1111          017
    011       9    00001001         1111          017
    012      10    00001010         1111          017
    013      11    00001011         1111          017
    014      12    00001100         1111          017
    015      13    00001101         1111          017       NOT ACCESSED
    016      14    00001110         1111          017       ************
    017      15    00001111         1111          017
    020      16    00010000         0011          003
    021      17    00010001         0011          003
    022      18    00010010         0011          003
    023      19    00010011         0011          003
    024      20    00010100         0101          005
    025      21    00010101         0101          005
    026      22    00010110         0101          005
    027      23    00010111         0101          005
    030      24    00011000         0101          005
    031      25    00011001         0101          005
    032      26    00011010         0101          005
    033      27    00011011         0101          005
    034      28    00011100         0011          003
    035      29    00011101         0011          003       BGE
    036      30    00011110         0011          003
    037      31    00011111         0011          003       ************

    040      32    00100000         0011          003
    041      33    00100001         0101          005
    042      34    00100010         0011          003
    043      35    00100011         0101          005
    044      36    00100100         0011          003
    045      37    00100101         0101          005
    046      38    00100110         0011          003
    047      39    00100111         0101          005
    050      40    00101000         0011          003
    051      41    00101001         0101          005
    052      42    00101010         0011          003
    053      43    00101011         0101          005
    054      44    00101100         0011          003
    055      45    00101101         0101          005       BNE
    056      46    00101110         0011          003
    057      47    00101111         0101          005       ************
    060      48    00110000         0011          003
    061      49    00110001         0101          005
    062      50    00110010         0011          003
    063      51    00110011         0101          005
    064      52    00110100         0101          005
    065      53    00110101         0101          005
    066      54    00110110         0101          005
    067      55    00110111         0101          005
    070      56    00111000         0101          005
    071      57    00111001         0101          005
    072      58    00111010         0101          005
    073      59    00111011         0101          005
    074      60    00111100         0011          003
    075      61    00111101         0101          005       BGT
    076      62    00111110         0011          003
    077      63    00111111         0101          005       ************
                   ++++++++
                   +++++++/( A(PIN #05) IS  DPE CC ZERO (1)H
                   ++++++/( B(PIN #06) IS  DPE CC COUT (1)H
                   +++++/( C(PIN #07) IS  DPE CC NEG (1)H
                   ++++/( D(PIN #04) IS  DPE CC VBIT (1)H
                   +++/( E(PIN #03) IS  DPF IR 10 (1)H
                   ++/( F(PIN #02) IS  DPF IR 09 (1)H
                   +/( G(PIN #01) IS  DPF IR 08 (1)H
                   /( H(PIN #15) IS  DPF IR 15 (1)H
```

```
                                /( *Y4 (PIN # 9) CONF MPC 03 L
                                */( *Y3 (PIN #10) CONF MPC 02 L
                                **/( *Y2 (PIN #11) CONF MPC 01 L
                                ***/( *Y1 (PIN #12) CONF MPC 04 L
  OCTAL DECIMAL                 ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ****          DATA
    100      64   01000000      0011          003
    101      65   01000001      0011          003
    102      66   01000010      0011          003
    103      67   01000011      0011          003
    104      68   01000100      0011          003
    105      69   01000101      0011          003
    106      70   01000110      0011          003
    107      71   01000111      0011          003
    110      72   01001000      0011          003
    111      73   01001001      0011          003
    112      74   01001010      0011          003
    113      75   01001011      0011          003
    114      76   01001100      0011          003
    115      77   01001101      0011          003       BR (ALWAYS)
    116      78   01001110      0011          003
    117      79   01001111      0011          003       ************
    120      80   01010000      0101          005
    121      81   01010001      0101          005
    122      82   01010010      0101          005
    123      83   01010011      0101          005
    124      84   01010100      0011          003
    125      85   01010101      0011          003
    126      86   01010110      0011          003
    127      87   01010111      0011          003
    130      88   01011000      0011          003
    131      89   01011001      0011          003
    132      90   01011010      0011          003
    133      91   01011011      0011          003
    134      92   01011100      0101          005
    135      93   01011101      0101          005       BLT
    136      94   01011110      0101          005
    137      95   01011111      0101          005       ************

    140      96   01100000      0101          005
    141      97   01100001      0011          003
    142      98   01100010      0101          005
    143      99   01100011      0011          003
    144     100   01100100      0101          005
    145     101   01100101      0011          003
    146     102   01100110      0101          005
    147     103   01100111      0011          003
    150     104   01101000      0101          005
    151     105   01101001      0011          003
    152     106   01101010      0101          005
    153     107   01101011      0011          003
    154     108   01101100      0101          005
    155     109   01101101      0011          003       BEQ
    156     110   01101110      0101          005
    157     111   01101111      0011          003       ************
    160     112   01110000      0101          005
    161     113   01110001      0011          003
    162     114   01110010      0101          005
    163     115   01110011      0011          003
    164     116   01110100      0011          003
    165     117   01110101      0011          003
    166     118   01110110      0011          003
    167     119   01110111      0011          003
    170     120   01111000      0011          003
    171     121   01111001      0011          003
    172     122   01111010      0011          003
    173     123   01111011      0011          003
    174     124   01111100      0101          005
    175     125   01111101      0011          003       BLE
    176     126   01111110      0101          005
    177     127   01111111      0011          003       ************
                  ********
                  *******/( A(PIN #05) IS  DPE CC ZERO (1)H
                  ******/( B(PIN #06) IS  DPE CC COUT (1)H
                  *****/( C(PIN #07) IS  DPE CC NEG (1)H
                  ****/( D(PIN #04) IS  DPE CC VBIT (1)H
                  ***/( E(PIN #03) IS  DPF IR 10 (1)H
                  **/( F(PIN #02) IS  DPF IR 09 (1)H
                  */( G(PIN #01) IS  DPF IR 08 (1)H
                  /( H(PIN #15) IS  DPF IR 15 (1)H
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```
                                /( *Y4 (PIN # 9) CONF MPC 03 L
                                */( *Y3 (PIN #10) CONF MPC 02 L
                                **/( *Y2 (PIN #11) CONF MPC 01 L
                                ***/( *Y1 (PIN #12) CONF MPC 04 L
                                ****          OCTAL
  OCTAL DECIMAL                 ****          DATA
ADDRESS ADDRESS    HGFEDCBA     ****
    200     128    10000000     0011          003
    201     129    10000001     0011          003
    202     130    10000010     0011          003
    203     131    10000011     0011          003
    204     132    10000100     0101          005
    205     133    10000101     0101          005
    206     134    10000110     0101          005
    207     135    10000111     0101          005
    210     136    10001000     0011          003
    211     137    10001001     0011          003
    212     138    10001010     0011          003
    213     139    10001011     0011          003
    214     140    10001100     0101          005
    215     141    10001101     0101          005       BPL
    216     142    10001110     0101          005
    217     143    10001111     0101          005       ************
    220     144    10010000     0011          003
    221     145    10010001     0011          003
    222     146    10010010     0011          003
    223     147    10010011     0011          003
    224     148    10010100     0011          003
    225     149    10010101     0011          003
    226     150    10010110     0011          003
    227     151    10010111     0011          003
    230     152    10011000     0101          005
    231     153    10011001     0101          005
    232     154    10011010     0101          005
    233     155    10011011     0101          005
    234     156    10011100     0101          005
    235     157    10011101     0101          005       BVC
    236     158    10011110     0101          005
    237     159    10011111     0101          005       ************

    240     160    10100000     0011          003
    241     161    10100001     0101          005
    242     162    10100010     0101          005
    243     163    10100011     0101          005
    244     164    10100100     0011          003
    245     165    10100101     0101          005
    246     166    10100110     0101          005
    247     167    10100111     0101          005
    250     168    10101000     0011          003
    251     169    10101001     0101          005
    252     170    10101010     0101          005
    253     171    10101011     0101          005
    254     172    10101100     0011          003
    255     173    10101101     0101          005       BHI
    256     174    10101110     0101          005
    257     175    10101111     0101          005       ************
    260     176    10110000     0011          003
    261     177    10110001     0011          003
    262     178    10110010     0101          005
    263     179    10110011     0101          005
    264     180    10110100     0011          003
    265     181    10110101     0011          003
    266     182    10110110     0101          005
    267     183    10110111     0101          005
    270     184    10111000     0011          003
    271     185    10111001     0011          003
    272     186    10111010     0101          005
    273     187    10111011     0101          005
    274     188    10111100     0011          003
    275     189    10111101     0011          003       BCC
    276     190    10111110     0101          005
    277     191    10111111     0101          005       ************
                   ********
                   ********/( A(PIN #05) IS  DPE CC ZERO (1)H
                   *******/( B(PIN #06) IS  DPE CC COUT (1)H
                   ******/( C(PIN #07) IS  DPE CC NEG (1)H
                   *****/( D(PIN #04) IS  DPE CC VBIT (1)H
                   ****/( E(PIN #03) IS  DPF IR 10 (1)H
                   ***/( F(PIN #02) IS  DPF IR 09 (1)H
                   **/( G(PIN #01) IS  DPF IR 08 (1)H
                   */( H(PIN #15) IS  DPF IR 15 (1)H
```

```
                                        /( *Y4 (PIN # 9) CONF MPC 03 L
                                        +/( *Y3 (PIN #10) CONF MPC 02 L
                                        ++/( *Y2 (PIN #11) CONF MPC 01 L
                                        +++/( *Y1 (PIN #12) CONF MPC 04 L
 OCTAL DECIMAL                          ++++      OCTAL
ADDRESS ADDRESS   HGFEDCBA              ++++      DATA
    300     192   11000000              0101      005
    301     193   11000001              0101      005
    302     194   11000010              0101      005
    303     195   11000011              0101      005
    304     196   11000100              0011      003
    305     197   11000101              0011      003
    306     198   11000110              0011      003
    307     199   11000111              0011      003
    310     200   11001000              0101      005
    311     201   11001001              0101      005
    312     202   11001010              0101      005
    313     203   11001011              0101      005
    314     204   11001100              0011      003
    315     205   11001101              0011      003       BNI
    316     206   11001110              0011      003
    317     207   11001111              0011      003       ************
    320     208   11010000              0101      005
    321     209   11010001              0101      005
    322     210   11010010              0101      005
    323     211   11010011              0101      005
    324     212   11010100              0101      005
    325     213   11010101              0101      005
    326     214   11010110              0101      005
    327     215   11010111              0101      005
    330     216   11011000              0011      003
    331     217   11011001              0011      003
    332     218   11011010              0011      003
    333     219   11011011              0011      003
    334     220   11011100              0011      003
    335     221   11011101              0011      003       BVS
    336     222   11011110              0011      003
    337     223   11011111              0011      003       ************

    340     224   11100000              0101      005
    341     225   11100001              0011      003
    342     226   11100010              0011      003
    343     227   11100011              0011      003
    344     228   11100100              0101      005
    345     229   11100101              0011      003
    346     230   11100110              0011      003
    347     231   11100111              0011      003
    350     232   11101000              0101      005
    351     233   11101001              0011      003
    352     234   11101010              0011      003
    353     235   11101011              0011      003
    354     236   11101100              0101      005
    355     237   11101101              0011      003       BLOS
    356     238   11101110              0011      003
    357     239   11101111              0011      003       ************
    360     240   11110000              0101      005
    361     241   11110001              0101      005
    362     242   11110010              0011      003
    363     243   11110011              0011      003
    364     244   11110100              0101      005
    365     245   11110101              0101      005
    366     246   11110110              0011      003
    367     247   11110111              0011      003
    370     248   11111000              0101      005
    371     249   11111001              0101      005
    372     250   11111010              0011      003
    373     251   11111011              0011      003
    374     252   11111100              0101      005
    375     253   11111101              0101      005       BCS
    376     254   11111110              0011      003
    377     255   11111111              0011      003       ************
                  ********
                  ********/( A(PIN #05) IS  DPE CC ZERO (1)H
                  *******/( B(PIN #06) IS  DPE CC COUT (1)H
                  ******/( C(PIN #07) IS  DPE CC NEG (1)H
                  *****/( D(PIN #04) IS  DPE CC VBIT (1)H
                  ****/( E(PIN #03) IS  DPF IR 10 (1)H
                  ***/( F(PIN #02) IS  DPF IR 09 (1)H
                  **/( G(PIN #01) IS  DPF IR 08 (1)H
                  */( H(PIN #15) IS  DPF IR 15 (1)H
```

PAGE REVISION CONTROL SHEET

SH NO	PAGE REVISIONS													REMARKS
1	H	J	K	L	M	N	P	R	S	T	U	V	W	*ETCH REV'D NOT TO BE USED PER ORDER D.E.
2	H	J	K	L	M	M	N	R	S	T	U	U	U	
3	H	H	H	H	H	H	H	R	R	R	R	R	R	
4	H	H	H	H	H	H	H	R	R	S	S	S	S	
5	H	H	J	J	J	J	J	R	R	R	R	S	S	
6	H	H	J	J	J	K	K	R	R	R	R	R	R	
7	H	H	J	J	J	J	J	R	R	S	S	S	S	
8	H	H	H	H	H	H	H	R	R	R	R	R	R	
9	H	H	J	J	J	J	J	R	R	R	R	R	R	
10	H	J	J	K	L	L	M	R	R	R	R	R	R	
11	H	H	J	K	K	K	K	R	R	R	S	T	T	
12	H	H	J	J	K	K	K	R	R	R	R	S	S	
13	H	H	J	J	K	K	K	R	S	S	S	S	S	
14	H	H	H	H	H	H	H	R	R	R	R	R	R	
ETCH REV	C	C	E*	E	E	E	E	F	F	F	F	F	*	~~** ECO #14 APPLIED TO ETCH REV G AND E BOARDS ONLY~~
ECO NO.	5	6	7	8	9	10	11	12	13	15	16	17	*	** ECO #14 & 18 APPLIED TO ETCH REV C AND E BOARDS ONLY. SEE SPECIAL PAGE REV. CONTROL SHEET APPLICABLE TO ETCH REV.
WZG						KCG	DBR	DBR	KCG	KCG	DLR	TAR	AE*	

FIRST USED ON OPTION/MODEL

DRN.	DATE	8/16/72
CHK'D. M T Tolman	DATE	8/21/72
ENG.	DATE	9/11/72
PROJ. ENG.	DATE	9/17/72
PROD. M T Tolman	DATE	9/19/72
NEXT HIGHER ASSY.		
SCALE		
SHEET 1 OF 14		

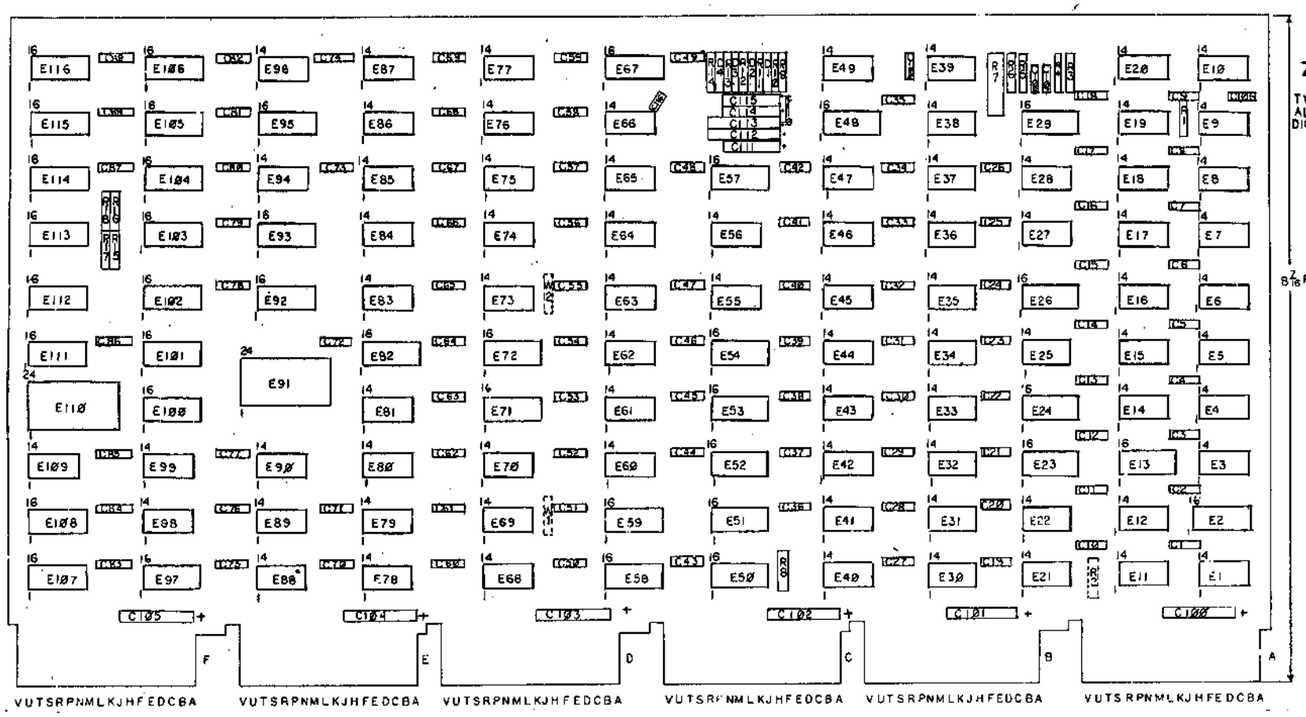
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

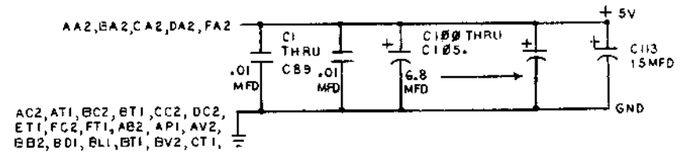
TITLE CONTROL LOGIC AND MICROPROGRAM

SIZE	CODE	NUMBER	REV.
B	CS	M7261-0-1	W

DIST.

NOTE: UNLESS OTHERWISE NOTED, RESISTANCE IS IN OHMS.
CAPACITANCE IS IN PICOFARADS.
* DEC 8640'S WERE PHASED IN AS 380 REPLACEMENTS.
ANY 380 FAILURES SHOULD BE REPLACED BY 8640'S.





QTY.	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
6	C100 THRU C105	CAPACITOR, 6.8 MFD, 35V, 10%, S.TA.	1005306	69
89	C1 THRU C89	CAPACITOR, .01 MFD, 100V, 20% DISC	1001610	68
2	C114,115	CAPACITOR, .68 MFD, 35V, 10%, S.TA.	1009964	67
1	C113	CAPACITOR, 15MFD, 20V, 10%, S.TA.	1004812	66
1	C112	CAPACITOR, 10 MFD, 20V, 10%, S.TA.	1004813	65
1	C111	CAPACITOR, 2.2MFD, 20V, 10%, S.TA.	1002627	64
1	C110	CAPACITOR, 220 PF, 100V, 5%, DM	1000021	63
1	C109	CAPACITOR, 120 PF, 100V, 5%, DM.	1000018	62
2	C108, C106	CAPACITOR, 1000 PF 100V, 5%, DM	1000042	61
1	C107	CAPACITOR, 2200 PF, 250V, 20%, DISC	1000055	60
1	C106	CAPACITOR, 470 PF, 100V, D.M.	1000024	59
4	D1,2,3,4.	DIODE D664	1100114	58
2	R6,R8	RESISTOR, 380, 1/4W, 5%.	1300309	57
1	R14	RESISTOR, 5.6K, 1/4W, 5%	1301874	56
1	R11	RESISTOR, 10K, 1/4W, 5%.	1300479	55
1	R7	RESISTOR, 1K, 3/4W, 10%, POT.	1309143-07	54
6	R4,5,9,10,12,13	RESISTOR, 30K, 1/4W, 5%	1302394	53
3	R3,16,18.	RESISTOR, 1K, 1/4W, 5%	1300365	52
6	E54,82,92,93,95,100.	RESISTOR NETWORK	1311003-02	51
1	R1	RESISTOR, 150, 1/4W, 5%	1300250	50
				49
2	R15,17	RESISTOR, 2K, 1/4W, 5%	1302388	48
				47
				46
1	E24	IC A01A2	23A01A2	45
1	E116	IC A19A2	23A19A2	44
1	E115	IC A13A2	23A13A2	43
1	E114	IC A11A2	23A11A2	42
1	E113	IC A18A2	23A18A2	41
1	E112	IC A10A2	23A10A2	40
1	E108	IC A14A1	23A14A1	39
1	E107	IC A09A2	23A09A2	38
1	E106	IC A17A2	23A17A2	37
1	E105	IC A16A2	23A16A2	36
1	E104	IC A05A2	23A05A2	35
1	E103	IC A20A2	23A20A2	34
1	E102	IC A04A2	23A04A2	33
1	E72	IC A09A1	23A09A1	32
1	E71	IC A07A1	23A07A1	31
1	E53	IC A02A2	23A02A2	30
2	E91,110.	IC DEC 74154	1909701	29
1	E89	IC DEC 7405	1909930	28
1	E61	IC DEC 7410	1905576	27
1	E60	IC DEC 7430	1905578	26
2	E58,59.	IC DEC 74153	1909937	25
3	E50,51,97.	IC DEC 74174	1910652	24
3	E49,78,109	IC DEC 74H01-1	1909849	23
2	E46,62.	IC DEC 7427	1910878	22
2	E45,69.	IC DEC 8815	1909713	21
1	E39	IC DEC 7413	1909989	20
2	E34,75.	IC DEC 7420	1905577	19
4	E29,48,57,67	IC DEC 9602	1910951	18
4	E25,63,83,90.	IC DEC 7404	1909686	17
7	E20,28,36,73,76,87,98.	IC DEC 7474	1905547	16
1	E17	IC DEC 7437	1910091	15
3	E12,22,32.	IC DEC 8640	1911468	14
4	E10,64,81,84.	IC DEC 74H40	1905586	13
10	E9,27,37,47,55,66,80,85,96,99	IC DEC 7400	1905575	12
13	E6,14,18,19,33,35,38,68,70,74,77,88,94.	IC DEC 7402	1909004	11
9	E4,7,8,15,16,44,56,65,86.	IC DEC 7473	1905587	10
3	E3,5,79.	IC DEC 7408	1910155	9
7	E2,13,23,26,52,101,111.	IC DEC 74175	1910651	8
9	E1,11,21,30,31,40 THRU 43.	IC DEC 8881	1909705	7
12		EYELET	9006732	6
1		HANDLE, MODULE	E-PS-12197II-02	5
1		ETCHED CIRCUIT BOARD	5009745	4
REF		MODULE ECO HISTORY	B-MH-M7261-0-6	3
REF		ASSY/DRILL HOLE LAYOUT	D-AH-M7261-0-5	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-M7261-0-4	1

PARTS LIST

TRANSISTOR & DIODE CONVERSION CHART			
DEC	EIA	DEC	EIA
D664	1N3605		

REVISIONS

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM
SIZE D | CODE CS | NUMBER M7261-0-1 | REV U
PRINTED CIRCUIT REV. F

SHEET 2 OF 14

CONA ENAB ALU L
CONA TRAN IN L
CONC DATI (1) H
CONC ADV ENAB (1) H
CONE SET SSYN H
DEI CONA ENAB ALU H
CONG ENAB PSW L
CONG ENAB SPR L
CONG ENAB SPL L
DEL CONA ENAB SWITCH REG L
CONA ENAB MODEM PSW L
CONA ENAB L CLK PSW L
CONA ENAB ALU L
CONA INT TRAN SYNC L
DPD AMUX 15 H CN2
DPD AMUX 14 H CE2
DPD AMUX 13 H CV2
DPD AMUX 12 H CE2
DPC AMUX 11 H CA1
DPC AMUX 10 H CM2
CONA BA 15 (1) H
CONA BA 14 (1) H
CONA BA 13 (1) H
CONA BA 12 (1) H
CONA BA 11 (1) H
CONA BA 10 (1) H
DPC AMUX Ø9 H CP2
DPC AMUX Ø8 H CL2
DPB AMUX Ø7 H CE1
DPB AMUX Ø6 H CE1
DPA AMUX Ø3 H CH2
DPA AMUX ØØ H CK2
CONA BAØ9 (1) H
CONA BAØ8 (1) H
CONA BAØ7 (1) H
CONA BAØ6 (1) H
CONA BAØ3 (1) H
CONA BAØØ (1) H
DPA AMUX Ø2 H CG1
DPA AMUX Ø1 H CB1
DPA AMUX Ø5 H CG2
DPA AMUX Ø4 H CD1
CONA BAØ2 N
CONA BAØ1 (1) H
CONA BAØ5 (1) H
CONA BA Ø4 (1) H
CONH PROC INIT L
CONG BA CLOCK L
W1
CONA TRAN OUT L
CONC DATO (1) H
CONC ADV ENAB (1) H
CONA LOAD MODEM PSW L
CONA ENAB MODEM PSW L
CONA XMIT L
CONA RECEIVE L
CONC CLR MSYN H DVI
DVL CONA DATA STROBE L
DDI CONA ENAB DATA H
DPI CONA LOAD XMIT PSW H
DAL CONA ENAB XMIT PSW H
DBL CONA LOAD RCD PSW H
DVI CONA ENAB RCD PSW H
DM2 CONG LOAD PSW L
CONG SP WRITE L
CONA LOAD MODEM PSW L
CONA LOAD L CLK PSW L
CONA RECEIVE L
CONA XMIT L
CONA REG ADDR L
CONA INT TRAN SYNC L

NOTE: JUMPER W1 IS INSTALLED TO DISABLE THE INTERNAL SERIAL INTERFACE. WITH W1 INSTALLED THE CPU DOES NOT RESPOND INTERNALLY TO ADDRESSES 177560 THRU 177546 AND ANOTHER INTERFACE RESPONDING TO THESE STANDARD CONSOLE DEVICE ADDRESSES CAN BE CONFIGURED WITH THE KCII-B.

INT ADDR DETECT

FIRST USED ON OPTION MODEL 11/05	QTY.	DESCRIPTION	PART NO. / ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX ± .005, .XX ± .02, .X ± .1; ANGLES 0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽▽▽	DWN. P. Price 10/1/73	digital EQUIPMENT CORPORATION	
	CHK'D	TITLE: CONTROL LOGIC & MICROPROGRAM (CONA)	
	ENG		
	PROJ		
MATERIAL	NEXT HIGHER ASSY. B-UD-KDII-B	SIZE D	CODE CS	NUMBER M7261-Ø-1	REV R
FINISH	SCALE		
	SHEET 3 OF 14	DIST	

D CS M7261-Ø-1

CONH INIT SYNC (1) L
CONE IR CLOCK H
CONV AROC CLOCK H
CONB RUN (1) H
CONB RUN LAMP L
CONB RUN (0) H
CONC OKAY BYTE L
CONA REG ADDR L
CONB BYTE CR REG H
CONE INH +/L
CONE BUT SWITCHES L
CONE START (1) L
CONB BUT SWITCHES H
CONE ENAB OVERFLOW L
CONB STACK FLOW (1) L
CONE STACK FLOW SER L
CONH AROC INIT L
CONG ROM SPA Φ3 H
CONA BA Φ3 (1) H
CONG ROM SPA Φ2 H
DPF IR Φ2 (1) H
DAF IR Φ8 (1) H
CONA BA Φ2 (1) H
CR2 CONB SPA Φ3 H
CS2 CONB SPA Φ2 H
DPC B-15=Φ H
CONB MASTER L
CONB MASTER H
CONC DATIP BBSY (0) H
CONC A REQ L
CONC MSYN (1) H
AROC INIT H
+3V R3
AS2 BUS NPR L
AR2 BUS SACK L
CONB TAKE BUS H
CONB ARBS GRANT L
CONG ROM SPA Φ1 H
DAF IR Φ1 (1) H
DAF IR Φ7 (1) H
CONA BA Φ1 (1) H
CONG ROM SPA ΦΦ H
DAF IR ΦΦ (1) H
DAF IR Φ6 (1) H
CONA BA ΦΦ (1) H
CONG SPA MUX Φ1 H
CONG SPA MUX ΦΦ H
CT2 CONB SPA Φ1 H
CV2 CONB SPA ΦΦ H
BUS NPG IN H
* NOTE: THIS JUMPER IS INSTALLED TO CREATE A "SLAVE" PROCESSOR.

STACKFLOW & SPM

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS xxx ± .005, .xx ± .02, .x ± .1
ANGLES ± 0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽

DRN: Jim Pinnell DATE 4/1/75
CHK'D DATE 10/24/73
ENG DATE 10/24/73
PROJ DATE 10/30/73
PROD DATE 10/30/73

MATERIAL
FINISH
NEXT HIGHER ASSY. B-DD-KD11-B
SCALE
SHEET 4 OF 14

digital EQUIPMENT CORPORATION

TITLE
CONTROL LOGIC & MICROPROGRAM (CONB)

SIZE	CODE	NUMBER	REV.
D	CS	M7261-0-1	S

DIST

DCS M7261-0-1 S

CONV DIV (1) L
CONG ENAB IN PAUSE L
DRG ENAB NON MOD H
7427 E9C
CONG DATI L
7402 E1B
CONG DATO L
7402 E1B
CONC DATIP (1) L
CONC BBSY (1) L
7402 E2
CONJ BC CLOCK H
CONC DATO (1) H
CONC BBSY (1) H
7408 E5
7473 E4 DATIP
7473 E4 DATO
7473 E4 BBSY
CONC DATIP BBSY (1) H
CONC DATIP BBSY (1) L
CONC DATO (1) H
7408 E5
CONC DATI (1) H
CONC D REQ L
CONB MASTER L
CONC NPG OR SACK H
CONB TAKE BUS H
COND BBSY H
7427 E4C
7402 E3B
7402 E3B
7402 E3A
7402 E3A
7473 E8 DATI
7473 E8 DATO
CONC DATO (1) H
CONC ADV ENAB (1) L
CONC SSYN (1) H
7402 E7A
CONA INT TRAN SYNC L
7404 E2A
CONC BBSY (1) H
7400 E4A DAI
CONC DAT ENAB L
7400 E4A
CONC DATIP (1) L
7400 E4A
CONC C0 H
CONC BR GRANT H
CONC BUT SERVICE H
74H81-1 E4A
CONG CKOFF L
+3V E93-4
7474 E7A ADV ENAB
CONC ADV ENAB (1) H
CONC ADV ENAB (1) L
CONJ PROC CLOCK L
CONH PROC INIT L
+3V R3
COND SSYN H
7474 E3A
CONC SSYN (1) H
CONC BBSY (1) H
CONC BBSY (1) L
CONJ UNG PROC CLOCK H
7473 E13 BBSY
7473 E13 MSYN
CONC MSYN (1) H
CONC MSYN (1) L
COND SSYN H
CONJ BC CLOCK H
CONC EOT H
COND INIT H
7437 E1A
CONC BUS INIT L
CONC CLR MSYN H
CONC BUS ERROR (1) H
7402 E7A
CONC DATO (1) H
7408 E5
7402 E1A
CONC MSYN OUT H
CONC TOTAL SSYN L
CONC BUS ERROR H
CONC SET DBE H
7408 E5
7473 E7 DBE
CONJ UNG PROC CLOCK H
CONC CLR MSYN H
74H81-1 E1B
CONF MAC Ø3 L
7400 E4A
CONC DB ERROR L
CONC BUS ERROR (1) H
OPR BYTE L
CONG ACCUM BYTE L
CONJ BC CLOCK H
CONC EOT H
CONC BUS INIT L
7427 E4C
7473 E1C BYTE
CONC OKAY BYTE L
CONA BABB (1) H
CONC D REQ L
CONB BYTE OR REQ H
7402 E6
7400 E3A
7402 E1B
CONC DAT TO (1) L
CONJ UNG PROC CLOCK H
CONC CLR MSYN H
7473 E7 BE
COND INIT H
CONB RUN (Ø) H
7402 E6
CONG CKOFF L
CONJ PROC CLOCK L
7474 E7A CKOFF
DHL CONC CKOFF (1) H
CONC CKOFF (Ø) H
CONC BG RESTART H
CONC CLR MSYN H
CONH CLR CKOFF L
7427 E6C2
7400 E3A
CONC CKOFF (1) L
CONC MSYN (1) L
7402 E3B
+3V R3
+5V
RP 30K
C107 2200
7402 E2B 22/15
CONC TOTAL SSYN L
7474 E2B DAT TO
CONC DAT TO (1) L
CONC EOT H
COND INIT H
7402 E6
CONC EOT CLR L

REVISIONS	REV
CHANGE S.C.	
CHK	

UNIBUS CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS .XX ± .005, .XX ± .02, .X ± .1
ANGLES ·0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ?
MATERIAL
FINISH

DRN. M. Poirier DATE 4/8/73
CHK D. DATE 10-2-73
ENG DATE 10-3-73
PROJ. ENG DATE 10-3-73
PROD. DATE 10-3-73

digital EQUIPMENT CORPORATION

TITLE
CONTROL LOGIC & MICROPROGRAM (CONC)

NEXT HIGHER ASSY. B-DD-KDH-B
SIZE D CODE CS NUMBER M7261-Ø-1 REV. S
SCALE
SHEET 5 OF 14
DIST.

DCS M7261-Ø-1 S

CONC DATIP BBSY (ϕ) L
CONC BG H
CONB RUN (1) L
8815 E45
CONC SET NPG H
CONJ BC CLOCK H
CONC NPG (1) H
CONC NPG (1) L
7473 E44 NRS
CONC CLR GRANT L
COND NPR H
CONJ UNG PROC CLOCK L
74175 E13
CONE SET SSYN H
CONJ PROC CLOCK H
COND INIT H
CONC SSYN OUT (1) H
7473 E36 SSYN OUT
+5V
0.1UF 10000PF
4.5 3ϕK
CONC BG H
CONC NPG (1) L
9602 E29 10115
+3V R3
CONC TO (1) H
7474 E28
CONC CLR GRANT L
74175 E2
COND INTR H
CONC MSYN (1) H
CONC MSYN (ϕ) L
7402 E14
CONC EOT H
7404 E25
COND SACK H
CONC TO (1) H
7402 E14
CONC BG H
CONJ BC CLOCK H
7408 E3
7473 E4
CONJ UNG PROC CLOCK L
CONC SACK OR TO DEL (1) H
CONC SACK OR TO DEL ϕ H
CONC BUS INIT L
CONJ BC CLOCK L
CONC SACK OR TO DEL (ϕ) H
7408 E3
CONC BG RESTART H

74175 E23 BR
COND BR ϕ7 H
COND BR ϕ6 H
COND BR ϕ5 H
COND BR ϕ4 H
CONC BUS INIT L
CONJ UNG PROC CLOCK L
A0IA2 E24 PRIORITY
DPE PSW ϕ7(ϕ) H CR1
DPE PSW ϕ6(ϕ) H CS1
DPE PSW ϕ5(ϕ) H CV1
CONJ L CLK INT L
ENBO ENBI
E34
74175 E26 BG
CONE BUT SERVICE H
CONJ PROC CLOCK H
7400 E27
7420 E34
CONC BR GRANT H
COND INIT H
CONC SACK OR TO DEL (1) H
7402 E33
CONC BG ϕ7 (1) L
CONC BG ϕ6 (1) L
CONC BG ϕ5 (1) L
CONC BG ϕ4 (1) L
CONC BG H
CONC CLR GRANT L
DPE T DEL (1) L
CONB STACK FLOW (1) L
CONH PDWN SYNC (1) L
7410 E61
CONC SET NPG H
CONC NPG (1) H
CONC SACK OR TO DEL (1) L
CONC NPG OR SACK H

PRIORITY ARBITRATION

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX ± .005, .XX ± .02, .X ± .1; ANGLES ± 0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN M. Patrick DATE 5/24/72
CHK [illegible] DATE 10/24/73
ENG [illegible] DATE 10/24/73
FIELD ENG [illegible] DATE 6/30/71
PROD [illegible] DATE 10/24/73

NEXT HIGHER ASSY: B-DD-KD11-B

SCALE —

SHEET 6 OF 10

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONC1)

SIZE D | CODE CS | NUMBER M7261-0-1 | REV R

DIST

REVISIONS: REV | CHANGE NO. | CHK

DEC FORM NO ORD 102-B

M7261-0-1 CS D 2

REV A

BUS NPR L — AS2 — 8640 E12 — COND NPR H
CONB MASTER L
BUS BR7 L — AT2 — 8640 E22 — COND BR Ø7 H
BUS BR6 L — AU2 — 8640 E22 — COND BR Ø6 H
BUS BR5 L — BC1 — 8640 E22 — COND BR Ø5 H
BUS BR4 L — BD2 — 8640 E22 — COND BR Ø4 H
BUS INTR L — AB1 — 8640 E12 — COND INTR H
BUS SACK L — AR2 — 8640 E12 — COND SACK H
COND ASRT BBSY H — AP2 — BUS BBSY L — 8640 E12 — COND BBSY H
CONC SSYN OUT (1)H — 8881 E40 — BU1 — BUS SSYN L — 8640 E32 — COND SSYN H
CONH PROC INIT L — 7437 E17
CONH RESET L
CONB MASTER H — 8881 E1 — AB1 — BUS INIT L — DV1 — COND INIT H
CONC NPG (1)L — 8881 E11 — R2,180 +5 — AU1 — BUS NPG H
CONB PASS GRANT L
CONC BG Ø7 (1)L — 8881 E21 — AV1 — BUS BG7 H
CONC BG Ø6 (1)L — 8881 E21 — BA1 — BUS BG6 H
CONC BG Ø5 (1)L — 8881 E21 — BB1 — BUS BG5 H
CONC BG Ø4 (1)L — 8881 E21 — BE2 — BUS BG4 H
CONC BUS ERROR (Ø) H — 8881 E40 — BV1 — BUS MSYN L
CONC MSYN OUT H
CONC DATO (1)H — 8881 E42 — BT2 — BUS C1 L
COND ASRT BBSY H — 8881 E42 — BU2 — BUS CØ L
CONC CØ H
BUS AC LO L — BF1 — 8640 E32 — COND AC LO H
BUS DC LO L — BF2 — 8640 E32 — COND DC LO H

NOTE: R2 INSTALLED ONLY WHEN W2 IS INSTALLED TO CREATE A SLAVE PROCESSOR.

CONA BA 13 (1)H
CONA BA 14 (1)H
CONA BA 15 (1)H — 74LØ E61 — 7400 E69 — 8881 E42 — BS1 — BUS A17 L
8881 E42 — BS2 — BUS A16 L
8881 E41 — BR1 — BUS A15 L
8881 E41 — BR2 — BUS A14 L
8881 E41 — BP1 — BUS A13 L
CONA BA 12 (1)H — 8881 E41 — BP2 — BUS A12 L
CONA BA 11 (1)H — 8881 E43 — BN1 — BUS A11 L
CONA BA 1Ø (1)H — 8881 E43 — BN2 — BUS A1Ø L
CONA BA Ø9 (1)H — 8881 E43 — BM1 — BUS AØ9 L
CONA BA Ø8 (1)H — 8881 E43 — BM2 — BUS AØ8 L
CONA BA Ø7 (1)H — 8881 E3Ø — BL1 — BUS AØ7 L
CONA BA Ø6 (1)H — 8881 E3Ø — BL2 — BUS AØ6 L
CONA BA Ø5 (1)H — 8881 E3Ø — BK1 — BUS AØ5 L
CONA BA Ø4 (1)H — 8881 E3Ø — BK2 — BUS AØ4 L
CONA BA Ø3 (1)H — 8881 E31 — BJ1 — BUS AØ3 L
CONA BA Ø2 (1)H — 8881 E31 — BJ2 — BUS AØ2 L
CONA BA Ø1 (1)H — 8881 E31 — BH1 — BUS AØ1 L
CONA BA ØØ (1)H — 8881 E31 — BH2 — BUS AØØ L
CONC DATIP BBSY (1) L — 7437 E17
CONC BBSY (1) L
COND ASRT BBSY H

DRIVERS & RECEIVERS

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005, .XX ± .02, X ± .1 — ANGLES ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. M. Pierce — DATE 4/20/73
CHK'DR — DATE 12-20-73
ENG. — DATE 12/26/73
APD. ENG. — DATE 12/26/73
APPD. — DATE 12/26/73
NEXT HIGHER ASSY.: B-DD-KD11-B
SCALE —
SHEET 7 OF 14

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (COND)

SIZE	CODE	NUMBER	REV
D	CS	M7261-Ø-1	S

DIST

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO DRD 102-B

M7261-Ø-1 S D CS

CONE SET SSYN H
CONC DB ERROR L
CONE MPC Φ6 L
CONE JMP OR JSR L
CONE BUT IR DECODE L
CONE BUT BYTE L
CONE ALLOW CONSTANTS L
CONE BUT DESTINATION L
CONE BUT MOVE L
CONE BUT INTERRUPT L
CONE BUT UNARY L
CONE BUT SWITCHES L
CONE BUT NON MOD L
CONE BUT SERVICE L
CONG BUT Φ3 L
CONG BUT Φ2 L
CONG BUT Φ1 L
CONG BUT ΦΦ L
CONE ENAB OVERFLOW L
CONJ UNG PROC CLOCK L
CONC BUS ERROR (1)H
CONE IR CLOCK H
CONE EXAM SW L
CONE BUT INIT H
CONE ENAB UNARY L
CONE DEP SW L
CONB BUT SWITCHES H
CONJ PROC CLOCK H
CONH PROC INIT L
CONE IST EXAM (1)H
CONE IST DEP (1)H
CONSOLE START L
CONSOLE LOAD L
CONSOLE DEP L
CONSOLE EXAM L
CONSOLE CONT L
CONSOLE STOP L
CONE START (1)L
CONE LOAD (1)L
CONE DEP (1)L
CONE EXAM (1)L
CONE CONT (1)L
CONE STOP (1)L
CONE EXAM SW L
CONF MPC Φ5 L
CONF MPC ΦΦ L
CONF MPC Φ4 L
CONF MPC Φ2 L
CONF MPC Φ3 L
CONE DEP SW L
CONF MPC Φ1 L
CONE BUT SWITCHES L
DPG CAL DEST L
CONE BUT IR DECODE L
CONE BUT DESTINATION H
CONE BUT DESTINATION L
DPG BYTE L
CONE BUT BYTE L
CONF MPC Φ5 L
CONA BA ΦΦ (1)H
CONF MPC Φ4 L
CONE BUT INTERRUPT L
CONC INTR SYNC (1) L
DPG TRAP L
CONE BUT IR DECODE L
DPG EMT L
CONF MPC Φ3 L
DPG RTS L
DPG MOVE L
CONF MPC Φ2 L
CONE BUT MOVE L
DPG BYTE L
DPG ENAB NON MOD H
CONE BUT MOVE H
CONE BUT NON MOD L
CONF MPC Φ1 L
CONF MPC ΦΦ L
DPE T DEL (1)L
DPG WAIT L
DPH XMIT INT L
DPH RCD INT L
CONE STOP (1)L
CONI L CLK INT L
CONH PDWN SYNC (1)L
CONB STACKFLOW (1)L
CONF MPC Φ6 L
CONF MPC Φ2 L
CONF MPC Φ1 L
CONF MPC ΦΦ L
CONC BR GRANT H
CONE BUT SERVICE H
CONE BUT SERVICE L
CONE L CLK SER L
CONE PWR FAIL SER L
CONE STACK FLOW SER L
CONE XMIT SER L
CONE RCD SER L

MICRO BRANCH LOGIC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = .1 — ANGLES: ±0°30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN Jim Pierce DATE 5NOV73
CHKD DATE 10-30-73
ENG DATE 11-26-73
PROJ. ENG DATE 2-13-73
PROD. DATE 5-10-73

NEXT HIGHER ASSY. B-DD-KD11-B
SCALE —
SHEET 8 OF 12

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONE)

SIZE D | CODE CS | NUMBER M7261-0-1 | REV. A | DIST.

REVISIONS — REV | CHANGE NO. | CHK

DEC-11-DBM-NO ORD 101-B

A0ØA2 E1Ø2

E1Ø2 +5V

FM2 CONF MPC Ø7 L
FM1 CONF MPC Ø6 L
FN1 CONF MPC Ø5 L
FN2 CONF MPC Ø4 L

CONC BUS ERROR (1)H

A1ØA2 E112

E1Ø1 +5V

FK1 CONF MPC Ø3 L
FM1 CONF MPC Ø2 L
FN2 CONF MPC Ø1 L
FP2 CONF MPC ØØ L

74175 E1Ø1 MPC

CONF MPC 7 L
CONF MPC Ø6 L
CONF MPC Ø5 L
CONF MPC Ø4 L

CONF ROM ADRS Ø7 (1)L
CONF ROM ADRS Ø7 (1)H
CONF ROM ADRS Ø6 (1)L
CONF ROM ADRS Ø6 (1)H
CONF ROM ADRS Ø5 (1)L
CONF ROM ADRS Ø5 (1)H
CONF ROM ADRS Ø4 (1)L
CONF ROM ADRS Ø4 (1)H

+3V E1ØØ-1Ø

A2ØA2 E1Ø3

E93 +5V

ED2 CONF ALU MODE H
EB1 CONF CIN H
EA1 CONF F SHIFT L
ER1 CONF PRE AUX L * SEE NOTE

CONH PROC INIT H

DPG DIS ALU S BITS H EJ2

A11A2 E114

E93 +5V

EE1 CONF ALU S3 L
EE2 CONF ALU S2 L
EE4 CONF ALU S1 L
ED1 CONF ALU S0 L

74175 E111 MPC

CONF MPC Ø3 L
CONF MPC Ø2 L
CONF MPC Ø1 L
CONF MPC ØØ L

CONF ROM ADRS Ø3 (1)L
CONF ROM ADRS Ø3 (1)H
CONF ROM ADRS Ø2 (1)L
CONF ROM ADRS Ø2 (1)H
CONF ROM ADRS Ø1 (1)L
CONF ROM ADRS Ø1 (1)H
CONF ROM ADRS ØØ (1)L
CONF ROM ADRS ØØ (1)H

CONF ROM ADRS Ø7 (1)H
CONF ROM ADRS Ø6 (1)H
CONF ROM ADRS Ø5 (1)H
CONF ROM ADRS Ø4 (1)H
CONF ROM ADRS Ø3 (1)H
CONF ROM ADRS Ø2 (1)H
CONF ROM ADRS Ø1 (1)H
CONF ROM ADRS ØØ (1)H

CONJ PROC CLOCK L

ES2 CONF AUX CONTROL L

EU2 CONF AUX BYTE H

DPG BYTE L

CONJ UNG PROC CLOCK L

CONC BUS INIT L

DPG MOVE L

CONE BUT MOVE H

NOTE: AUX CONTROL IS ASSERTED ONE MICRO STEP EARLIER THAN IN ETCH REV C AND E. THIS PIN (E103 PIN 12) CONNECTS TO ROM 23-A10A1 ON THE M7260 MODULE WHICH PREVIOUSLY CONNECTED TO CONS CKOFF L. THIS ETCH REV DOES NOT EVER SHUT ITS CLOCK OFF TO PERFORM AN AUX CONTROL.

REVISIONS | REV | CHANGE NO | CHK

MICRO PC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS XXX ± .005, XX ± .02, X ± .1 | ANGLES ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN Tim Perrin DATE 7/25/72
CHK'D DATE 10/30/72
ENG DATE 01/30/73
PROJ ENG DATE 01/30/73
PROD DATE 10/30/72
NEXT HIGHER ASSY: B-DD-KD11-B
SCALE
SHEET 8 OF 4

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONF)

SIZE D | CODE CS | NUMBER M7261-Ø-1 | REV R | DIST

DEC FORM NO DRD 102-B

DATE CODE D | CS | NUMBER M7261-Ø-1 | REV R

A19A2 E116
E95 +5V
CONG CKOFF L
CONG ALLOW BYTE L
CONG DATO L
CONG DATI L
CONJ BUS ERROR CONH

A17A2 E106
E95 +5V
CONJ PROC CLOCK L
7402 E94
CONG BA CLOCK L
EH2 CONG BTOP H
CONG SP WRITE L
EF1 CONG SP WRITE H
CONG ROM SPA Ø2 H
EP2 CONG ROM ALEG 1 L
EM2 CONG ROM ALEG Ø L
CONG BMODE ØØ H

A13A2 E115
E95 +5V
CONG SPA MUX ØØ H
CONG ROM SPA ØØ H
CONG SPA MUX Ø1 H
7408 E79
EB1 CONG BBOT H

A05A2 E104
E93 +5V
R15 2K
R16 1K
R17 2K
R18 1K
DPF ROTATE H
7402 E94
74H01-1 E48
74H01-1 E78
74H01-1 E78
74H01-1 E78
E82 +5V
7404 E83
CONG ENAB PSW L
EN2 CONG ENAB PSW H
CONG ENAB SPL L
EX1 CONG ENAB SPR L
EM1 CONG BMODE Ø1 H

A18A2 E113
E92 +5V
CONG BUT Ø1 L
CONG BUT Ø0 L
CONG BUT Ø2 L
CONG BUT Ø3 L
CONH PROC INIT H

A16A2 E105
E92 +5V
E95 +5V
CONG LOAD PSW L
CONG ROM SPA Ø1 H
CONG ROM SPA Ø3 H
CONG ENAB IN PAUSE L

CONF ROM ADRS Ø7 (Ø)L
CONF ROM ADRS Ø6 (Ø)L
CONF ROM ADRS Ø5 (Ø)L
CONF ROM ADRS Ø4 (Ø)L
CONF ROM ADRS Ø3 (Ø)L
CONF ROM ADRS Ø2 (Ø)L
CONF ROM ADRS Ø1 (Ø)L
CONF ROM ADRS ØØ (Ø)L

CONF ROM ADRS Ø7 (Ø)H
CONF ROM ADRS Ø6 (Ø)H
CONF ROM ADRS Ø5 (Ø)H
CONF ROM ADRS Ø4 (Ø)H
CONF ROM ADRS Ø3 (Ø)H
CONF ROM ADRS Ø2 (Ø)H
CONF ROM ADRS Ø1 (Ø)H
CONF ROM ADRS ØØ (Ø)H

CONTROL STORE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX ±.005 .XX ±.02 .X ±.1
ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY
MATERIAL
FINISH

DRN [illegible] DATE 5/2/73
CHK [illegible] DATE 10-24-73
ENG [illegible] DATE 10/24/73
PROJ. ENG. DATE 10/24/73
PROD DATE 10/24/73

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE CONTROL LOGIC MICROPROGRAM (CONG)

NEXT HIGHER ASSY B-DD-KD11-B

SIZE	CODE	NUMBER	REV
D	CS	M7261-Ø-1	R

SCALE
SHEET 10 OF 14
DIST

REVISIONS REV CHANGE NO CHK

DEC FORM NO DRD 107-B

SIZE FORM D CS M7261-Ø-1 REV R

COND DC LO H
CONH PDWN (Φ) H
CONH INIT SYNC (Φ) L
CONC NPG OR SACK H
COND BBSY H
CONJ UNG PROC CLOCK L
CONC BUS INIT L
CONE BUT INIT H
CONJ PROC CLOCK H
CONH CLR CKOFF L
CONE START (1) L
CONH INIT (Φ) H
CONJ PROC CLOCK H
CONH INIT SYNC (1) H
CONH INIT SYNC (1) L
CONH INIT SYNC (Φ) L
+3V E93-4
+5V
R12 30K
C113 .15μF
R11 10K
C114 .68μF
COND AC LO H
CONH PDWN (1) H
R10 30K
C115 .68μF
CONE PWR FAIL SER L
CONH PROC INIT L
CONJ PROC CLOCK H
FT2 CONH PROC INIT H
FS1 CONH PROC INIT L
CONH PDWN SYNC (1) L
CONH OSC INH L
CONH RESET L
CONH CLR CKOFF L
+3V R3
R9 30K
C110 220
R13 30K
C112 .01μF
CONH PDWN (1) L
CONH PROC INIT H

FIRST USED ON OPTION/MODEL 11/05	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: 0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽

MATERIAL —
FINISH —

DRWN M. Rivera DATE
CHK'D DATE
ENGR DATE 10/30/73
PROJ ENG DATE 10/30/73
APPD DATE 10/30/73
NEXT HIGHER ASSY B-DD-KDII-B

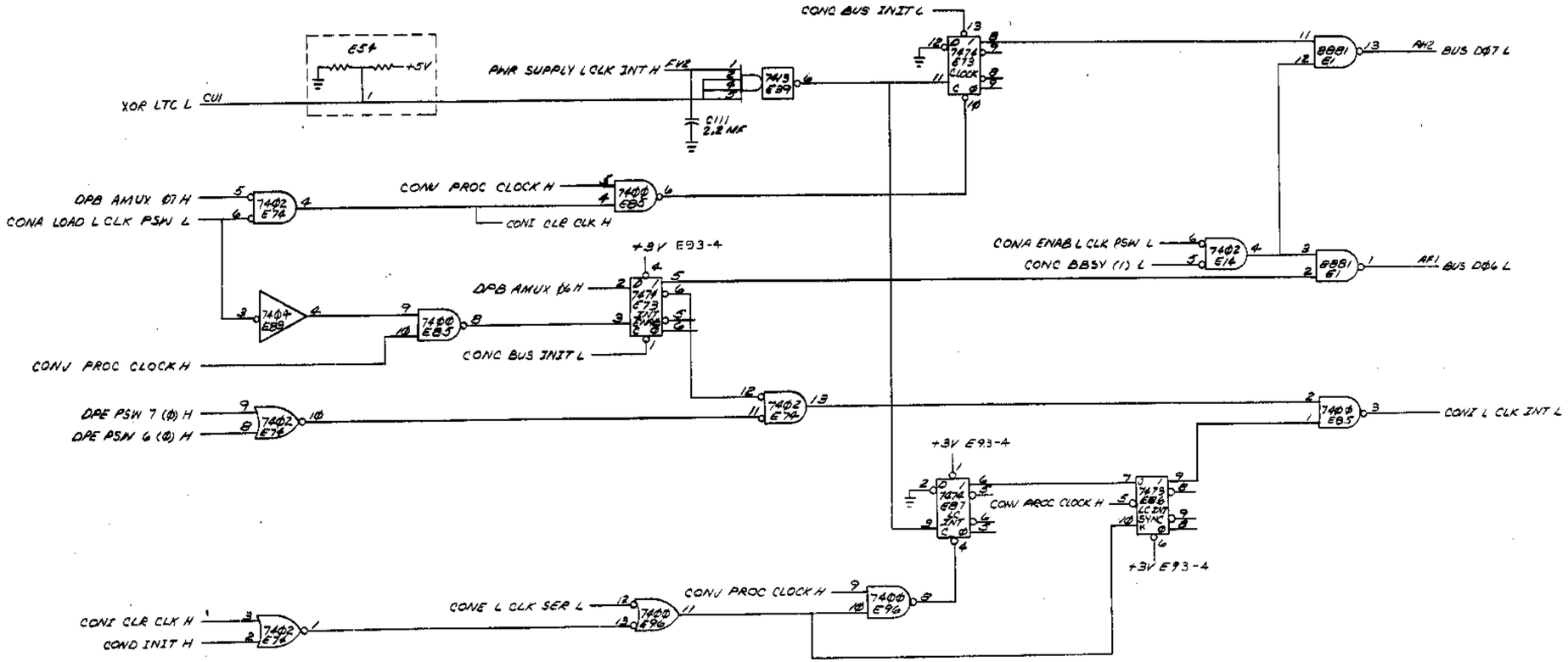
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
CONTROL LOGIC & MICROPROGRAM (CONH)

SIZE D | CODE CS | NUMBER M7261-0-1 | REV. T
SCALE —
SHEET 11 OF 14
DIST

POWER FAIL

DCS M7261-0-1 T



LINE CLOCK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: xxx ± .005, .xx ± .02, .x ± .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽

ORN	Jim Rice	4/5/73
CHK'D		
ENG		10/30/73
PROJ ENG		10/30/73
APPD		10/30/73

MATERIAL —
FINISH —
NEXT HIGHER ASSY 8-DD-KD11-B
SCALE —
SHEET 12 OF 14

digital EQUIPMENT CORPORATION

TITLE: CONTROL LOGIC & MICROPROGRAM (CONT)

SIZE	CODE	NUMBER	REV.
D	CS	M7261-0-1	S

DIST.

CONJ S CLK ON L FU2
CONJ MAN CLK L FH1
E100 +5V 7 11
13 74H04 E85 12
CONJ BC CLOCK L
CONJ BC CLOCK H
CONJ LNG PROC CLOCK L FV1
CONJ LNG PROC CLOCK H DV1
CONJ DIV (1) L
CONJ DIV (1) H
CONJ PROC CLOCK L
CONJ PROC CLOCK H EV1
CONC CKOFF (1) L
CONH OSC INH L
CONC TOTAL SSYN L
CONC BUS ERROR H
CONC MSYN (1) H
CONC CKOFF (1) H
CONJ DIV (1) H
CONSOLE START L
74H20 E75
74H02 E98
74H04 E99
74H13 E39
R6 390
R7 1K
C109 120
+5V R16 5.6K
+3VR3
74H02 E37
CONF F SHFT L
74H73 E63
74H40 E64
E34 +5V 14
XOR SYNC L DD2

CPU CLOCK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS .XX = .02 .X = .1 .XXX = .005
ANGLES ±0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽

DRN M. Arico 4/15/73
CHK'D 10-30-73
ENGR 10/30/73
PROJ ENGR 10/30/73
PROD 10/30/73

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE CONTROL LOGIC & MICROPROGRAM (CONJ)

MATERIAL
FINISH
NEXT HIGHER ASSY. B-0D-KD11-B
SCALE 1/1
SHEET 13 OF 14

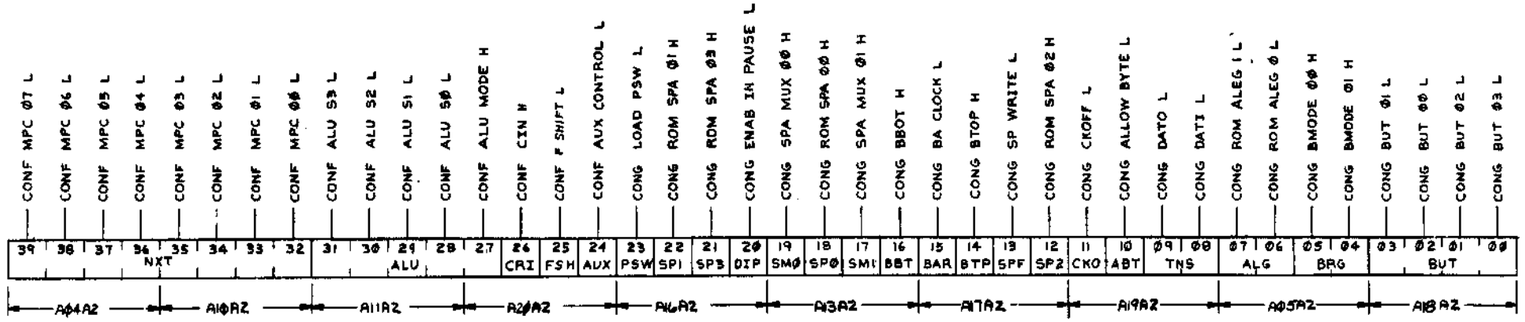
SIZE	CODE	NUMBER	REV.
D	CS	M7261-0-1	S

DIST

REVISIONS			
LTR	CHANGE NO	DATE	APPROVED

DEC FORM NO 12-11111-C

DCSM7261-0-1 S



	31	30	29	28	27
	ALU				
AL	L	L	L	L	H
AA	L	L	L	H	L
AB	L	L	L	H	H
AØ	L	L	H	L	L
Ø	L	L	H	L	H
A OR B	L	L	H	H	L
BL	L	L	H	H	H
A PLUS B	L	H	L	L	L
A XOR B	L	H	L	L	H
A-B-1	L	H	L	H	L
B	L	H	L	H	H
-1	L	H	H	L	L
A-1	L	H	H	L	H
Ā	L	H	H	H	L
ASL	L	H	H	H	H
ROL	H	L	L	L	L
ASR	H	L	L	L	H
ROR	H	L	L	H	L

26 CRI	
OFF	L
ON	H

23 PSW	
HOLD	H
LOAD	L

14 BTP	
BREG	H
SEX	L
+1	L

10 ABT	
NO	H
YES	L

	Ø5 BRG	Ø4 BRG
LOAD	H	H
SLEFT	L	H
SRIGHT	H	L
HOLD	L	L

	Ø3 BUT	Ø2 BUT	Ø1 BUT	Ø0 BUT
NON	H	H	H	H
JMP/USR	H	L	H	H
IR DECODE	L	H	H	H
BYTE	L	L	H	H
CONST	H	H	L	H
DEST	H	L	L	H
MOV	L	H	L	H
INTR	L	L	L	H
INIT	H	H	H	L
UNARY	H	L	H	L
SWITCHES	L	H	H	L
NON MOD	L	L	H	L
SERVICE	H	H	L	L
SSYNC	H	L	L	L
ENOVFLO	L	H	L	L
IR CLK	L	L	L	L

25 FSH	
OFF	H
ON	L

20 DIP	
OFF	H
ON	L

16 BBT	
BRG	H
SEX	H
+1	L

13 SPF	
READ	H
WRITE	L

	Ø9 TNS	Ø8 TNS
NONE	H	H
DATI	H	L
DATO	L	H

24 AUX	
OFF	H
ON	L

	19 SMØ	17 SMI
ROM	H	H
IRS	H	L
IRD	L	H
BA	L	L

15 BAR	
HOLD	H
LOAD	L

11 CKO	
OFF	H
ON	L

	Ø7 ALG	Ø6 ALG
SP	H	H
NULL	H	L
SPR	L	H
PSW	L	L

CONTROL STORE WORD FORMAT

REVISIONS		
CHK	CHANGE NO	REV

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. M. Reiss DATE 5/23/73
CHK'D DATE 12-20-73
ENG DATE (0/24/73)
PROJ ENG DATE (0/24/73)
PROD DATE

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM

NEXT HIGHER ASSY 8-DD-KD11-B
SIZE D CODE CS NUMBER M7261-Ø-1 REV R
SCALE
SHEET 14 OF 14
DIST

DEC FORM NO DAD 102-B

PAGE REVISION CONTROL SHEET

SH NO	PAGE REVISIONS	REMARKS
1	A	
2	A	
3	A	
4	A	
5	A	
6	A	
7	A	
8	A	
9	A	
10	A	
11	A	
12	A	
13	A	
14	A	
15	A	
16	A	
17	A	

ETCH REV C

ECO NO. 5

FIRST USED ON OPTION/MODEL

DRN.		DATE
CHK'D.		DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE
NEXT HIGHER ASSY.		
SCALE		
SHEET 1 OF 17		

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE

CONTROL LOGIC ROM PATTERNS

SIZE	CODE	NUMBER	REV.
B	RL	M7261-0-8	A

DIST.

```
                        /( =Y8 (PIN #9) CONA INT TRAN SYNC L
                        */( =Y7 (PIN #7) CONA REG ADDR L
                        **/( =Y6 (PIN #6) CONA RECEIVE L
                        ***/( =Y5 (PIN #5) CONA TRANSMIT L
                        ****/( =Y4 (PIN #4) CONA LOAD MODEM PSW L
                        *****/( =Y3 (PIN #3) CONA LOAD L CLK PSW L
                        ******/( =Y2 (PIN #2) CONG SP WRITE L
                        *******/( =Y1 (PIN #1) CONG LOAD PSW L
  OCTAL DECIMAL         ********              OCTAL
ADDRESS ADDRESS  EDCBA  ********              DATA
   000      0    00000  11111111              377
   001      1    00001  11111111              377
   002      2    00010  11111111              377
   003      3    00011  11111111              377
   004      4    00100  01111110              176       PSW ,TRAN OUT BA=177776
   005      5    00101  11111111              377       PSW ,TRAN OUT,BAR
   006      6    00110  01111211              173       LCLK ,TRANOUT
   007      7    00111  11111111              377       LCLK ,TRANOUT,BAR
   010      8    01000  00111171              075       GR<R0|R17> ,TRANOUT BA=1777XX
   011      9    01001  10111111              277       GR<R0|R17> ,TRANOUT,BAR
   012     10    01010  01111111              177       ODD BYTE (LCLK/TX/TP)
   013     11    01011  11111111              377
   014     12    01100  11111111              377
   015     13    01101  11111111              377
   016     14    01110  01111111              177       SWR ,TRANOUT BA=177570
   017     15    01111  11111111              377       SWR ,TRANOUT,BAR
   020     16    10000  01101111              127       TKS ,TRANOUT BA=177560
   021     17    10001  11011111              337       TKS ,TRANOUT,BAR
   022     18    10010  01100111              147       TPS ,TRANOUT BA=177564
   023     19    10011  11101111              357       TPS ,TRANOUT,BAR
   024     20    10100  01011111              137       TKB ,TRANOUT BA=177562
   025     21    10101  11011111              337       TKB ,TRANOUT,BAR
   026     22    10110  01101111              157       TPB ,TRANOUT BA=177566
   027     23    10111  11101111              357       TPB ,TRANOUT,BAR
   030     24    11000  11111111              377
   031     25    11001  11111111              377
   032     26    11010  11111111              377
   033     27    11011  11111111              377
   034     28    11100  11111111              377
   035     29    11101  11111111              377
   036     30    11110  11111111              377
   037     31    11111  11111111              377
                        *****
                        ****/( A(PIN #10) IS  CONA TRAN OUT L
                        ***/( B(PIN #11) IS  Y3 OF F025
                        **/( C(PIN #12) IS  Y2 OF F025
                        */( D(PIN #13) IS  Y1 OF F025
                        /( E(PIN #14) IS  Y4 OF F025
```

```
                        /( =Y8 (PIN #9) CONA ENAB L CLK PSW L
                        +/( =Y7 (PIN #7) CONA INT TRAN SYNC L
                        ++/( =Y6 (PIN #6) CONA ENAB ALU L
                        +++/( =Y5 (PIN #5) CONA ENAB MODEM PSW L
                        ++++/( =Y4 (PIN #4) CONA ENAB SWITCH REG L
                        +++++/( =Y3 (PIN #3) CONG ENAB SPL L
                        ++++++/( =Y2 (PIN #2) CONG ENAB SPR L
                        +++++++/( =Y1 (PIN #1) CONG ENAB PSW L
  OCTAL DECIMAL         ++++++++          OCTAL
ADDRESS ADDRESS  RDCBA  ++++++++          DATA
   000      0    00000  11111111          377
   001      1    00001  11111111          377
   002      2    00010  11111111          377
   003      3    00011  11111111          377
   004      4    00100  10011110          236        PSW ,TRANIN BA=177776
   005      5    00101  11111111          377        PSW ,TRANIN,BAR
   006      6    00110  00111111          777        LCLK ,TRANIN BA=177546
   007      7    00111  11111111          377        LCLK ,TRANIN,BAR
   010      8    01000  10011001          231        GEN REG, ,TRANIN BA=1777XX
   011      9    01001  11111111          377        GEN REG ,TRANIN,BAR
   012     10    01010  10111111          277        ODD BYTE ADDRESS (LCLK/TK/TP)
   013     11    01011  11111111          377
   014     12    01100  11111111          377
   015     13    01101  11111111          377
   016     14    01110  10010111          227        SWR ,TRANIN BA=177570
   017     15    01111  11111111          377        SWR ,TRANIN,BAR
   020     16    10000  10001111          217        TKS ,TRANIN BA=177560
   021     17    10001  11111111          377        TKS ,TRANIN,BAR
   022     18    10010  10001111          217        TPS ,TRANIN BA=177564
   023     19    10011  11111111          377        TPS ,TRANIN,BAR
   024     20    10100  10011111          237        TKB ,TRANIN BA=177562
   025     21    10101  11111111          377        TKB ,TRANIN,BAR
   026     22    10110  10011111          237        TPB ,TRANIN BA=177566
   027     23    10111  11111111          377        TPB ,TRANIN,BAR
   030     24    11000  11111111          377
   031     25    11001  11111111          377
   032     26    11010  11111111          377
   033     27    11011  11111111          377
   034     28    11100  11111111          377
   035     29    11101  11111111          377
   036     30    11110  11111111          377
   037     31    11111  11111111          377
                        +++++
                        ++++/( A(PIN #10) IS  CONA TRAN IN L
                        +++/( B(PIN #11) IS  Y3 OF F025
                        ++/( C(PIN #12) IS  Y2 OF F025
                        +/( D(PIN #13) IS  Y1 OF F025
                        /( E(PIN #14) IS  Y4 OF F025
```

```
                        /( =Y8 (PIN #9)
                        +/( =Y7 (PIN #7) CONE LINE CLOCK SER L
                        ++/( =Y6 (PIN #6) CONE STACK FLOW L
                        +++/( =Y5 (PIN #5) CONE PWR FAIL SER L
                        ++++/( =Y4 (PIN #4) CONE RCD SER L
                        +++++/( =Y3 (PIN #3) CONE XMIT SER L
                        ++++++/( =Y2 (PIN #2)
                        +++++++/( =Y1 (PIN #1)
  OCTAL DECIMAL         ++++++++          OCTAL
ADDRESS ADDRESS  EDCBA  ++++++++          DATA
   000      0    00000  11111111          377
   001      1    00001  11111111          377
   002      2    00010  11111111          377
   003      3    00011  11111111          377
   004      4    00100  11111111          377
   005      5    00101  11111111          377
   006      6    00110  11111111          377
   007      7    00111  11111111          377
   010      8    01000  11111111          377
   011      9    01001  11111111          377
   012     10    01010  11110111          367       UART RCD INT MPC=64
   013     11    01011  11111111          377
   014     12    01100  11111111          377
   015     13    01101  11111111          377
   016     14    01110  11111011          373       UART XMIT INT MPC=60
   017     15    01111  11111111          377
   020     16    10000  11111111          377
   021     17    10001  11111111          377
   022     18    10010  11011111          337       ERT=1A STACK FLOW MPC=46
   023     19    10011  11111111          377
   024     20    10100  11101111          357       PWR FAIL MPC=43
   025     21    10101  11111111          377
   026     22    10110  10111111          277       LINE CLK INT MPC=42
   027     23    10111  11111111          377
   030     24    11000  11111111          377
   031     25    11001  11111111          377
   032     26    11010  11111111          377
   033     27    11011  11111111          377
   034     28    11100  11111111          377
   035     29    11101  11111111          377
   036     30    11110  11111111          377
   037     31    11111  11111111          377
                        +++++
                        ++++/( A(PIN #10) IS  CONN RUN GND L
                        +++/( B(PIN #11) IS  CONF MPC 00 L
                        ++/( C(PIN #12) IS  CONF MPC 02 L
                        +/( D(PIN #13) IS  CONF MPC 01 L
                        /( E(PIN #14) IS  CONF MPC 04 L
```

```
                        /( =Y8 (PIN #9) CONF MPC 05 L
                        */( =Y7 (PIN #7) CONE EXAM SW L
                        **/( =Y6 (PIN #6) CONE DEP SW L
                        ***/( =Y5 (PIN #5) CONF MPC 00 L
                        ****/( =Y4 (PIN #4) CONF MPC 04 L
                        *****/( =Y3 (PIN #3) CONF MPC 01 L
                        ******/( =Y2 (PIN #2) CONF MPC 02 L
                        *******/( =Y1 (PIN #1) CONF MPC 03 L
  OCTAL DECIMAL         ********        OCTAL
ADDRESS ADDRESS  EDCBA  ********        DATA
   000      0  00000  11111000          370       CONTINUE
   001      1  00001  11111011          373       TWO SW *CONT,DEP
   002      2  00010  11111011          373       TWO SW EXAM,CONT
   003      3  00011  11111011          373       TWO SW LOAD,CONT
   004      4  00100  11111011          373       NO SW
   005      5  00101  11001010          312       DEP SW1 GOTO 313
   006      6  00110  10101000          250       EXAM GOTO TO 317
   007      7  00111  11101110          356       LOAD  GOTO TO 311
   010      8  01000  11111000          370       CONT=CLR EXAM
   011      9  01001  11111011          373       TWO SW *CONT,DEP
   012     10  01010  11101011          353       TWO SW EXAM,CONT
   013     11  01011  11101011          353       TWO SW LOAD,CONT
   014     12  01100  10111011          273       NO SW 1ST EXAM
   015     13  01101  11001010          312       DEP SW1
   016     14  01110  10101100          254       EXAM AND 1ST EXAM 320
   017     15  01111  11101110          356       LOAD GOTO 311
   020     16  10000  11111000          370       CONT=CLR DEP
   021     17  10001  11111011          373       TWO SW *CONT,DEP
   022     18  10010  11111011          373       TWO SW EXAM,CONT
   023     19  10011  11011011          333       TWO SW LOAD,CONT
   024     20  10100  11011011          333       NO SW 1ST DEP
   025     21  10101  11011010          332       DEP SW2 GOTO 312
   026     22  10110  10101000          250       EXAM,1ST DEP 317
   027     23  10111  11101110          356       LOAD GOTO 311
   030     24  11000  00000100          004
   031     25  11001  00000000          000
   032     26  11010  00000000          000
   033     27  11011  00000000          000
   034     28  11100  00000000          000
   035     29  11101  00000000          000
   036     30  11110  00000000          000
   037     31  11111  00000000          000
                        *****
                        ****/( A(PIN #10) IS  CONE LOAD (1)L ,AND, DEP (1)L ;BAR
                        ***/( B(PIN #11) IS  CONE LOAD (1)L ;AND, EXAM (1)L ;BAR
                        **/( C(PIN #12) IS  CONE CONT (1)L
                        */( D(PIN #13) IS  CONE 1ST EXAM (1)H
                        /( E(PIN #14) IS  CONE 1ST DEP (1)H
```

6

```
                                    /( =Y4 (PIN # 9) CONC SET BG 07 L
                                    */( =Y3 (PIN #10) CONC SET BG 06 L
                                    **/( =Y2 (PIN #11) CONC SET BG 05 L
                                    ***/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                     ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA          ****          DATA
    000       0   00000000          1111          017
    001       1   00000001          1111          017
    002       2   00000010          1111          017
    003       3   00000011          1111          017
    004       4   00000100          1111          017
    005       5   00000101          1111          017
    006       6   00000110          1111          017
    007       7   00000111          1111          017
    010       8   00001000          1111          017
    011       9   00001001          1111          017
    012      10   00001010          1111          017
    013      11   00001011          1111          017
    014      12   00001100          1111          017
    015      13   00001101          1111          017
    016      14   00001110          1111          017
    017      15   00001111          1111          017
    020      16   00010000          1111          017
    021      17   00010001          1111          017
    022      18   00010010          1111          017
    023      19   00010011          1111          017
    024      20   00010100          1111          017
    025      21   00010101          1111          017
    026      22   00010110          1111          017
    027      23   00010111          1111          017
    030      24   00011000          1111          017
    031      25   00011001          1111          017
    032      26   00011010          1111          017
    033      27   00011011          1111          017
    034      28   00011100          1111          017
    035      29   00011101          1111          017
    036      30   00011110          1111          017
    037      31   00011111          1111          017
```

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6
Cont

```
    040      32   00100000          0111          007
    041      33   00100001          1011          013
    042      34   00100010          0111          007
    043      35   00100011          1111          017     LCLK
    044      36   00100100          0111          007
    045      37   00100101          1011          013
    046      38   00100110          0111          007
    047      39   00100111          1101          015
    050      40   00101000          0111          007
    051      41   00101001          1011          013
    052      42   00101010          0111          007
    053      43   00101011          1111          017
    054      44   00101100          0111          007
    055      45   00101101          1011          013
    056      46   00101110          0111          007
    057      47   00101111          1110          016
    060      48   00110000          0111          007
    061      49   00110001          1011          013
    062      50   00110010          0111          007
    063      51   00110011          1111          017     LCLK
    064      52   00110100          0111          007
    065      53   00110101          1011          013
    066      54   00110110          0111          007
    067      55   00110111          1101          015
    070      56   00111000          0111          007
    071      57   00111001          1011          013
    072      58   00111010          0111          007
    073      59   00111011          1111          017
    074      60   00111100          0111          007
    075      61   00111101          1011          013
    076      62   00111110          0111          007
    077      63   00111111          1111          017
                  ********
                  ********/( A(PIN #05) IS  CONC BR 07 (1)L
                  *******/( B(PIN #06) IS  CONC BR 06 (1)L
                  ******/( C(PIN #07) IS  CONI LCLK INT L
                  *****/( D(PIN #04) IS  CONC BR 05 (1)L
                  ****/( E(PIN #03) IS  CONC BR 04 (1)L
                  ***/( F(PIN #02) IS  DPE PSW 07 (0)H
                  **/( G(PIN #01) IS  DPE PSW 06 (0)H
                  */( H(PIN #15) IS  DPE PSW 05 (0)H
```

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```
                                    /( #Y4 (PIN # 9) CONC SET BG 07 L
                                    */( #Y3 (PIN #10) CONC SET BG 06 L
                                    **/( #Y2 (PIN #11) CONC SET BG 05 L
                                    ***/( #Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                     ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA          ****          DATA
    100      64   01000000          0111          007
    101      65   01000001          1011          013
    102      66   01000010          0111          007
    103      67   01000011          1111          017
    104      68   01000100          0111          007
    105      69   01000101          1011          013
    106      70   01000110          0111          007
    107      71   01000111          1111          017
    110      72   01001000          0111          007
    111      73   01001001          1011          013
    112      74   01001010          0111          007
    113      75   01001011          1111          017
    114      76   01001100          0111          007
    115      77   01001101          1011          013
    116      78   01001110          0111          007
    117      79   01001111          1111          017
    120      80   01010000          0111          007
    121      81   01010001          1011          013
    122      82   01010010          0111          007
    123      83   01010011          1111          017
    124      84   01010100          0111          007
    125      85   01010101          1011          013
    126      86   01010110          0111          007
    127      87   01010111          1111          017
    130      88   01011000          0111          007
    131      89   01011001          1011          013
    132      90   01011010          0111          007
    133      91   01011011          1111          017
    134      92   01011100          0111          007
    135      93   01011101          1011          013
    136      94   01011110          0111          007
    137      95   01011111          1111          017
```

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7 CONT

```
    140      96   01100000          0111          007
    141      97   01100001          1011          013
    142      98   01100010          0111          007
    143      99   01100011          1111          017     LCLK
    144     100   01100100          0111          007
    145     101   01100101          1011          013
    146     102   01100110          0111          007
    147     103   01100111          1101          015
    150     104   01101000          0111          007
    151     105   01101001          1111          017
    152     106   01101010          0111          007
    153     107   01101011          1111          017     LCLK
    154     108   01101100          0111          007
    155     109   01101101          1011          013
    156     110   01101110          0111          007
    157     111   01101111          1110          016
    160     112   01110000          0111          007
    161     113   01110001          1011          013
    162     114   01110010          0111          007
    163     115   01110011          1111          017     LCLK
    164     116   01110100          0111          007
    165     117   01110101          1011          013
    166     118   01110110          0111          007
    167     119   01110111          1101          015
    170     120   01111000          0111          007
    171     121   01111001          1011          013
    172     122   01111010          0111          007
    173     123   01111011          1111          017
    174     124   01111100          0111          007
    175     125   01111101          1011          013
    176     126   01111110          0111          007
    177     127   01111111          1111          017
                  ********
                  ********/( A(PIN #09) IS  CONC BR 07 (1)L
                  *******/( B(PIN #06) IS  CONC BR 06 (1)L
                  ******/( C(PIN #07) IS  CONI LCLK INT L
                  *****/( D(PIN #04) IS  CONC BR 05 (1)L
                  ****/( E(PIN #03) IS  CONC BR 04 (1)L
                  ***/( F(PIN #02) IS  DPE PSW 07 (0)H
                  **/( G(PIN #01) IS  DPE PSW 06 (0)H
                  */( H(PIN #15) IS  DPE PSW 05 (0)H
```

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```
                                /( *Y4 (PIN # 9) CONC SET BG 07 L
                                */( *Y3 (PIN #10) CONC SET BG 06 L
                                **/( *Y2 (PIN #11) CONC SET BG 05 L
                                ***/( *Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                 ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ****          DATA
    200     128   10000000      0111          007
    201     129   10000001      1111          017
    202     130   10000010      0111          007
    203     131   10000011      1111          017
    204     132   10000100      0111          007
    205     133   10000101      1111          017
    206     134   10000110      0111          007
    207     135   10000111      1111          017
    210     136   10001000      0111          007
    211     137   10001001      1111          017
    212     138   10001010      0111          007
    213     139   10001011      1111          017
    214     140   10001100      0111          007
    215     141   10001101      1111          017
    216     142   10001110      0111          007
    217     143   10001111      1111          017
    220     144   10010000      0111          007
    221     145   10010001      1111          017
    222     146   10010010      0111          007
    223     147   10010011      1111          017
    224     148   10010100      0111          007
    225     149   10010101      1111          017
    226     150   10010110      0111          007
    227     151   10010111      1111          017
    230     152   10011000      0111          007
    231     153   10011001      1111          017
    232     154   10011010      0111          007
    233     155   10011011      1111          017
    234     156   10011100      0111          007
    235     157   10011101      1111          017
    236     158   10011110      0111          007
    237     159   10011111      1111          017
```

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8" COD

```
    240     160   10100000      0111          007
    241     161   10100001      1011          013
    242     162   10100010      0111          007
    243     163   10100011      1111          017     LCLK
    244     164   10100100      0111          007
    245     165   10100101      1011          013
    246     166   10100110      0111          007
    247     167   10100111      1101          015
    250     168   10101000      0111          007
    251     169   10101001      1011          013
    252     170   10101010      0111          007
    253     171   10101011      1111          017     LCLK
    254     172   10101100      0111          007
    255     173   10101101      1011          013
    256     174   10101110      0111          007
    257     175   10101111      1110          016
    260     176   10110000      0111          007
    261     177   10110001      1011          013
    262     178   10110010      0111          007
    263     179   10110011      1111          017     LCLK
    264     180   10110100      0111          007
    265     181   10110101      1011          013
    266     182   10110110      0111          007
    267     183   10110111      1101          015
    270     184   10111000      0111          007
    271     185   10111001      1011          013
    272     186   10111010      0111          007
    273     187   10111011      1111          017
    274     188   10111100      0111          007
    275     189   10111101      1011          013
    276     190   10111110      0111          007
    277     191   10111111      1111          017
                  ********
                  *******/( A(PIN #05) IS  CONC BR 07 (1)L
                  ******/( B(PIN #06) IS  CONC BR 06 (1)L
                  *****/( C(PIN #07) IS  CONI LCLK INT L
                  ****/( D(PIN #04) IS  CONC BR 05 (1)L
                  ***/( E(PIN #03) IS  CONC BR 04 (1)L
                  **/( F(PIN #02) IS  DPE PSW 07 (0)H
                  */( G(PIN #01) IS  DPE PSW 06 (0)H
                  /( H(PIN #15) IS  DPE PSW 05 (0)H
```

```
                                /( =Y4 (PIN # 9) CONC SET BG 07 L
                                */( =Y3 (PIN #10) CONC SET BG 06 L
                                **/( =Y2 (PIN #11) CONC SET BG 05 L
                                ***/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                 ****          OCTAL
 ADDRESS ADDRESS   HGFEDCBA     ****          DATA
     300     192   11000000     0111          007
     301     193   11000001     1011          013
     302     194   11000010     0111          007
     303     195   11000011     1111          017       LCLK
     304     196   11000100     0111          007
     305     197   11000101     1011          013
     306     198   11000110     0111          007
     307     199   11000111     1101          015
     310     200   11001000     0111          007
     311     201   11001001     1011          013
     312     202   11001010     0111          007
     313     203   11001011     1111          017       LCLK
     314     204   11001100     0111          007
     315     205   11001101     1011          013
     316     206   11001110     0111          007
     317     207   11001111     1111          017
     320     208   11010000     0111          007
     321     209   11010001     1011          013
     322     210   11010010     0111          007
     323     211   11010011     1111          017       LCLK
     324     212   11010100     0111          007
     325     213   11010101     1011          013
     326     214   11010110     0111          007
     327     215   11010111     1101          015
     330     216   11011000     0111          007
     331     217   11011001     1011          013
     332     218   11011010     0111          007
     333     219   11011011     1111          017
     334     220   11011100     0111          007
     335     221   11011101     1011          013
     336     222   11011110     0111          007
     337     223   11011111     1111          017
```

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```
     340     224   11100000     0111          007
     341     225   11100001     1011          013
     342     226   11100010     0111          007
     343     227   11100011     1111          017       LCLK
     344     228   11100100     0111          007
     345     229   11100101     1011          013
     346     230   11100110     0111          007
     347     231   11100111     1101          015
     350     232   11101000     0111          007
     351     233   11101001     1011          013
     352     234   11101010     0111          007
     353     235   11101011     1111          017       LCLK
     354     236   11101100     0111          007
     355     237   11101101     1011          013
     356     238   11101110     0111          007
     357     239   11101111     1110          016
     360     240   11110000     0111          007
     361     241   11110001     1011          013
     362     242   11110010     0111          007
     363     243   11110011     1111          017       LCLK
     364     244   11110100     0111          007
     365     245   11110101     1011          013
     366     246   11110110     0111          007
     367     247   11110111     1101          015
     370     248   11111000     0111          007
     371     249   11111001     1011          013
     372     250   11111010     0111          007
     373     251   11111011     1111          017
     374     252   11111100     0111          007
     375     253   11111101     1011          013
     376     254   11111110     0111          007
     377     255   11111111     1111          017
                   ********
                   ********/( A(PIN #05) IS  CONC BR 07 (1)L
                   *******/( B(PIN #06) IS  CONC BR 06 (1)L
                   ******/( C(PIN #07) IS  CONI LCLK INT L
                   *****/( D(PIN #04) IS  CONC BR 05 (1)L
                   ****/( E(PIN #03) IS  CONC BR 04 (1)L
                   ***/( F(PIN #02) IS  DPE PSW 07 (0)H
                   **/( G(PIN #01) IS  DPE PSW 06 (0)H
                   */( H(PIN #15) IS  DPE PSW 05 (?)H
```

```
                                    /( =Y4 (PIN # 9) Y4
                                    +/( =Y3 (PIN #10) Y3
                                    ++/( =Y2 (PIN #11) Y2
                                    +++/( =Y1 (PIN #12) Y1
                                    ++++          OCTAL
 OCTAL DECIMAL                      ++++          DATA
ADDRESS ADDRESS   HGFEDCBA          ++++
   000       0   00000000          0000          000
   001       1   00000001          0000          000
   002       2   00000010          0000          000
   003       3   00000011          0000          F00
   004       4   00000100          0000          F00
   005       5   00000101          0000          F00
   006       6   00000110          0000          F00
   007       7   00000111          0000          000
   010       8   00001000          0000          F00
   011       9   00001001          0000          F00
   012      10   00001010          0000          F00
   013      11   00001011          0000          F00
   014      12   00001100          0000          F00
   015      13   00001101          0000          F00
   016      14   00001110          0000          F00
   017      15   00001111          0000          F00
   020      16   00010000          0000          F00
   021      17   00010001          0000          F00
   022      18   00010010          0000          F00
   023      19   00010011          0000          F00
   024      20   00010100          0000          F00
   025      21   00010101          0000          F00
   026      22   00010110          0000          F00
   027      23   00010111          0000          F00
   030      24   00011000          0000          F00
   031      25   00011001          0000          000
   032      26   00011010          0000          F00
   033      27   00011011          0000          F00
   034      28   00011100          0000          F00
   035      29   00011101          0000          F00
   036      30   00011110          0000          F00
   037      31   00011111          0000          000
```

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```
   040      32   00100000          0000          F00
   041      33   00100001          0000          F00
   042      34   00100010          0000          F00
   043      35   00100011          0000          F00
   044      36   00100100          0000          F00
   045      37   00100101          0000          F00
   046      38   00100110          0000          F00
   047      39   00100111          0000          F00
   050      40   00101000          0000          F00
   051      41   00101001          0000          F00
   052      42   00101010          0000          F00
   053      43   00101011          0000          F00
   054      44   00101100          0000          F00
   055      45   00101101          0000          F00
   056      46   00101110          0000          F00
   057      47   00101111          0000          F00
   060      48   00110000          0000          000
   061      49   00110001          0000          F00
   062      50   00110010          0000          000
   063      51   00110011          0000          F00
   064      52   00110100          0000          F00
   065      53   00110101          0000          F00
   066      54   00110110          0000          F00
   067      55   00110111          0000          F00
   070      56   00111000          0000          F00
   071      57   00111001          0000          F00
   072      58   00111010          0000          F00
   073      59   00111011          0000          F00
   074      60   00111100          0000          F00
   075      61   00111101          0000          F00
   076      62   00111110          0000          F00
   077      63   00111111          0000          F00
                ++++++++
                ++++++++/( A(PIN #05) IS  CONA BA 02 (1)H
                ++++++/( B(PIN #06) IS  CONA BA 01 (1)H
                +++++/( C(PIN #07) IS  CONA BA 00 (1)H
                ++++/( D(PIN #04) IS  CONA BA 03 (1)H
                +++/( E(PIN #03) IS  CONA BA 04 (1)H
                ++/( F(PIN #02) IS  CONA BA 05 (1)H
                +/( G(PIN #01) IS  CONA BA 07 (1)H
                /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                /( =Y4 (PIN # 9) Y4
                                +/( =Y3 (PIN #10) Y3
                                ++/( =Y2 (PIN #11) Y2
                                +++/( =Y1 (PIN #12) Y1
  OCTAL DECIMAL                 ++++          OCTAL
  ADDRESS ADDRESS   HGFEDCBA    ++++          DATA
      100      64   01000000    0000          000
      101      65   01000001    0000          000
      102      66   01000010    0000          000
      103      67   01000011    0000          000
      104      68   01000100    0000          000
      105      69   01000101    0000          000
      106      70   01000110    0000          000
      107      71   01000111    0000          000
      110      72   01001000    0000          000
      111      73   01001001    0000          000
      112      74   01001010    0000          000
      113      75   01001011    0000          000
      114      76   01001100    0000          000
      115      77   01001101    0000          000
      116      78   01001110    0000          000
      117      79   01001111    0000          000
      120      80   01010000    0000          000
      121      81   01010001    0000          000
      122      82   01010010    0000          000
      123      83   01010011    0000          000
      124      84   01010100    0000          000
      125      85   01010101    0000          000
      126      86   01010110    0000          000
      127      87   01010111    0000          000
      130      88   01011000    0000          000
      131      89   01011001    0000          000
      132      90   01011010    0000          000
      133      91   01011011    0000          000
      134      92   01011100    0000          000
      135      93   01011101    0000          000
      136      94   01011110    0000          000
      137      95   01011111    0000          000
```

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```
      140      96   01100000    0000          000
      141      97   01100001    0000          000
      142      98   01100010    0000          000
      143      99   01100011    0000          000
      144     100   01100100    0000          000
      145     101   01100101    0000          000
      146     102   01100110    0000          000
      147     103   01100111    0000          000
      150     104   01101000    0000          000
      151     105   01101001    0000          000
      152     106   01101010    0000          000
      153     107   01101011    0000          000
      154     108   01101100    0000          000
      155     109   01101101    0000          000
      156     110   01101110    0000          000
      157     111   01101111    0000          000
      160     112   01110000    0000          000
      161     113   01110001    0000          000
      162     114   01110010    0000          000
      163     115   01110011    0000          000
      164     116   01110100    0000          000
      165     117   01110101    0000          000
      166     118   01110110    0000          000
      167     119   01110111    0000          000
      170     120   01111000    0000          000
      171     121   01111001    0000          000
      172     122   01111010    0000          000
      173     123   01111011    0000          000
      174     124   01111100    0000          000
      175     125   01111101    0000          000
      176     126   01111110    0000          000
      177     127   01111111    0000          000
                    ++++++++
                    +++++++/( A(PIN #05) IS  CONA BA 02 (1)H
                    ++++++/( B(PIN #06) IS  CONA BA 01 (1)H
                    +++++/( C(PIN #07) IS  CONA BA 00 (1)H
                    ++++/( D(PIN #04) IS  CONA BA 03 (1)H
                    +++/( E(PIN #03) IS  CONA BA 04 (1)H
                    ++/( F(PIN #02) IS  CONA BA 05 (1)H
                    +/( G(PIN #01) IS  CONA BA 07 (1)H
                    /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                        /( #Y4 (PIN # 9) Y4
                                        */( #Y3 (PIN #10) Y3
                                        **/( #Y2 (PIN #11) Y2
                                        ***/( #Y1 (PIN #12) Y1
 OCTAL DECIMAL                          ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA              ****          DATA
    200     128   10000000              0000          000
    201     129   10000001              0000          000
    202     130   10000010              0000          000
    203     131   10000011              0000          000
    204     132   10000100              0000          000
    205     133   10000101              0000          000
    206     134   10000110              0000          000
    207     135   10000111              0000          000
    210     136   10001000              0000          000
    211     137   10001001              0000          000
    212     138   10001010              0000          000
    213     139   10001011              0000          000
    214     140   10001100              0000          000
    215     141   10001101              0000          000
    216     142   10001110              0000          000
    217     143   10001111              0000          000
    220     144   10010000              0000          000
    221     145   10010001              0000          000
    222     146   10010010              0000          000
    223     147   10010011              0000          000
    224     148   10010100              0000          000
    225     149   10010101              0000          000
    226     150   10010110              0000          000
    227     151   10010111              0000          000
    230     152   10011000              0000          000
    231     153   10011001              0000          000
    232     154   10011010              0000          000
    233     155   10011011              0000          000
    234     156   10011100              0000          000
    235     157   10011101              0000          000
    236     158   10011110              0000          000
    237     159   10011111              0000          000
```

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```
    240     160   10100000              0000          000
    241     161   10100001              0000          000
    242     162   10100010              0000          000
    243     163   10100011              0110          006     KW11-L LINE CLK CSR
    244     164   10100100              0000          000
    245     165   10100101              0000          000
    246     166   10100110              0000          000
    247     167   10100111              0101          005     KW11-L (ODD BYTE)
    250     168   10101000              0000          000
    251     169   10101001              0000          000
    252     170   10101010              0000          000
    253     171   10101011              0000          000
    254     172   10101100              0000          000
    255     173   10101101              0000          000
    256     174   10101110              0000          000
    257     175   10101111              0000          000
    260     176   10110000              1000          010     TKS TTY KEYBOARD CSR
    261     177   10110001              1100          014     TPS PRINTER CSR
    262     178   10110010              1010          012     TKB TTY KEYBOARD  DBR
    263     179   10110011              1110          016     TPB TTY PRINTER DBR
    264     180   10110100              0101          005     TKS (ODD BYTE)
    265     181   10110101              0101          005     TPS (ODD BYTE)
    266     182   10110110              0101          005     TKB (ODD BYTE)
    267     183   10110111              0101          005     TPB (ODD BYTE)
    270     184   10111000              0111          007     SWITCH REGISTER
    271     185   10111001              0000          000
    272     186   10111010              0000          000
    273     187   10111011              0000          000
    274     188   10111100              0111          007     CONSOLE SW REG, (ODD BYTE)
    275     189   10111101              0000          000
    276     190   10111110              0000          000
    277     191   10111111              0000          000
                  ********
                  ********/( A(PIN #05) IS  CONA BA 02 (1)H
                  *******/( B(PIN #06) IS  CONA BA 01 (1)H
                  ******/( C(PIN #07) IS  CONA BA 00 (1)H
                  *****/( D(PIN #04) IS  CONA BA 03 (1)H
                  ****/( E(PIN #03) IS  CONA BA 04 (1)H
                  ***/( F(PIN #02) IS  CONA BA 05 (1)H
                  **/( G(PIN #01) IS  CONA BA 07 (1)H
                  */( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                    /( *Y4 (PIN # 9) Y4
                                    */( *Y3 (PIN #10) Y3
                                    **/( *Y2 (PIN #11) Y2
                                    ***/( *Y1 (PIN #12) Y1
                                    ****          OCTAL
 OCTAL DECIMAL                      ****          DATA
ADDRESS ADDRESS   HGFEDCBA          ****
   300     192   11000000          0001          001       REG R0
   301     193   11000001          0001          001       REG R4
   302     194   11000010          0001          001       REG R2
   303     195   11000011          0001          001       REG R6
   304     196   11000100          0001          001       REG R1
   305     197   11000101          0001          001       REG R5
   306     198   11000110          0001          001       REG R3
   307     199   11000111          0001          001       REG R7
   310     200   11001000          0001          001       REG R10
   311     201   11001001          0001          001       REG R14
   312     202   11001010          0001          001       REG R12
   313     203   11001011          0001          001       REG R16
   314     204   11001100          0001          001       REG R11
   315     205   11001101          0001          001       REG R15
   316     206   11001110          0001          001       REG R13
   317     207   11001111          0001          001       REG R17
   320     208   11010000          0000          000
   321     209   11010001          0000          000
   322     210   11010010          0000          000
   323     211   11010011          0000          000
   324     212   11010100          0000          000
   325     213   11010101          0000          000
   326     214   11010110          0000          000
   327     215   11010111          0000          000
   330     216   11011000          0000          000
   331     217   11011001          0000          000
   332     218   11011010          0000          000
   333     219   11011011          0000          000
   334     220   11011100          0000          000
   335     221   11011101          0000          000
   336     222   11011110          0000          000
   337     223   11011111          0000          000
```

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```
   340     224   11100000          0000          000
   341     225   11100001          0000          000
   342     226   11100010          0000          000
   343     227   11100011          0000          000
   344     228   11100100          0000          000
   345     229   11100101          0000          000
   346     230   11100110          0000          000
   347     231   11100111          0000          000
   350     232   11101000          0000          000
   351     233   11101001          0000          000
   352     234   11101010          0000          000
   353     235   11101011          0000          000
   354     236   11101100          0000          000
   355     237   11101101          0000          000
   356     238   11101110          0000          000
   357     239   11101111          0000          000
   360     240   11110000          0000          000
   361     241   11110001          0000          000
   362     242   11110010          0000          000
   363     243   11110011          0000          000
   364     244   11110100          0000          000
   365     245   11110101          0000          000
   366     246   11110110          0000          000
   367     247   11110111          0000          000
   370     248   11111000          0000          000
   371     249   11111001          0000          000
   372     250   11111010          0000          000
   373     251   11111011          0010          002       PSW
   374     252   11111100          0000          000
   375     253   11111101          0000          000
   376     254   11111110          0000          000
   377     255   11111111          0010          002       PSW (ODD BYTE)
                 ********
                 *******/( A(PIN #05) IS  CONA BA 02 (1)H
                 ******/( B(PIN #06) IS  CONA BA 01 (1)H
                 *****/( C(PIN #07) IS  CONA BA 00 (1)H
                 ****/( D(PIN #04) IS  CONA BA 03 (1)H
                 ***/( E(PIN #03) IS  CONA BA 04 (1)H
                 **/( F(PIN #02) IS  CONA BA 05 (1)H
                 */( G(PIN #01) IS  CONA BA 07 (1)H
                 /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                /( *Y4 (PIN # 9) CONF MPC B4 L
                                +/( *Y3 (PIN #10) CONF MPC B1 L
                                **/( *Y2 (PIN #11) CONF MPC B2 L
                                ***/( *Y1 (PIN #12) CONF MPC B8 L
                                ****          OCTAL
 OCTAL DECIMAL                  ****          DATA
ADDRESS ADDRESS   HGFEDCBA      ****
   000       0   00000000      1100          B14       T
   001       1   00000001      1100          B14       T
   002       2   00000010      1100          B14       T
   003       3   00000011      1100          B14       T
   004       4   00000100      1100          B14       T
   005       5   00000101      1100          B14       T
   006       6   00000110      1100          B14       T
   007       7   00000111      1100          B14       T
   010       8   00001000      1100          B14       T
   011       9   00001001      1100          B14       T
   012      10   00001010      1100          B14       T
   013      11   00001011      1100          B14       T
   014      12   00001100      1100          B14       T
   015      13   00001101      1100          B14       T
   016      14   00001110      1100          B14       T
   017      15   00001111      1100          B14       T
   020      16   00010000      1100          B14       T
   021      17   00010001      1100          B14       T
   022      18   00010010      1100          B14       T
   023      19   00010011      1100          B14       T
   024      20   00010100      1100          B14       T
   025      21   00010101      1100          B14       T
   026      22   00010110      1100          B14       T
   027      23   00010111      1100          B14       T
   030      24   00011000      1100          B14       T
   031      25   00011001      1100          B14       T
   032      26   00011010      1100          B14       T
   033      27   00011011      1100          B14       T
   034      28   00011100      1100          B14       T
   035      29   00011101      1100          B14       T
   036      30   00011110      1100          B14       T
   037      31   00011111      1100          B14       T

   040      32   00100000      1100          B14       T
   041      33   00100001      1100          B14       T
   042      34   00100010      1100          B14       T
   043      35   00100011      1100          B14       T
   044      36   00100100      1100          B14       T
   045      37   00100101      1100          B14       T
   046      38   00100110      1100          B14       T
   047      39   00100111      1100          B14       T
   050      40   00101000      1100          B14       T
   051      41   00101001      1100          B14       T
   052      42   00101010      1100          B14       T
   053      43   00101011      1100          B14       T
   054      44   00101100      1100          B14       T
   055      45   00101101      1100          B14       T
   056      46   00101110      1100          B14       T
   057      47   00101111      1100          B14       T
   060      48   00110000      1100          B14       T
   061      49   00110001      1100          B14       T
   062      50   00110010      1100          B14       T
   063      51   00110011      1100          B14       T
   064      52   00110100      1100          B14       T
   065      53   00110101      1100          B14       T
   066      54   00110110      1100          B14       T
   067      55   00110111      1100          B14       T
   070      56   00111000      1100          B14       T
   071      57   00111001      1100          B14       T
   072      58   00111010      1100          B14       T
   073      59   00111011      1100          B14       T
   074      60   00111100      1100          B14       T
   075      61   00111101      1100          B14       T
   076      62   00111110      1100          B14       T
   077      63   00111111      1100          B14       T
                ********
                ********/( A(PIN #05) IS  CONB STACKFLOW (1)L
                *******/( B(PIN #06) IS  CONH PDHN SYNC (1)L
                ******/( C(PIN #07) IS  CONI LCLK INT (1)L
                *****/( D(PIN #04) IS  CONE STOP (1)L
                ****/( E(PIN #03) IS  DPH RCD INT (1)L
                ***/( F(PIN #02) IS  DPH XMIT INT (1)L
                **/( G(PIN #01) IS  DPG WAIT L
                */( H(PIN #15) IS  DPE T DEL (1)L
```

```
                                    /( #Y4 (PIN # 9) CONF MPC #4 L
                                    */( #Y3 (PIN #10) CONF MPC #1 L
                                    **/( #Y2 (PIN #11) CONF MPC #2 L
                                    ***/( #Y1 (PIN #12) CONF MPC #0 L
  OCTAL DECIMAL                     ****          OCTAL
 ADDRESS ADDRESS   HGFEDCBA         ****          DATA
    100      64   #1000000          1100          #14       T
    101      65   #1000001          1100          #14       T
    102      66   #1000010          1100          #14       T
    103      67   #1000011          1100          #14       T
    104      68   #1000100          1100          #14       T
    105      69   #1000101          1100          #14       T
    106      70   #1000110          1100          #14       T
    107      71   #1000111          1100          #14       T
    110      72   #1001000          1100          #14       T
    111      73   #1001001          1100          #14       T
    112      74   #1001010          1100          #14       T
    113      75   #1001011          1100          #14       T
    114      76   #1001100          1100          #14       T
    115      77   #1001101          1100          #14       T
    116      78   #1001110          1100          #14       T
    117      79   #1001111          1100          #14       T
    120      80   #1010000          1100          #14       T
    121      81   #1010001          1100          #14       T
    122      82   #1010010          1100          #14       T
    123      83   #1010011          1100          #14       T
    124      84   #1010100          1100          #14       T
    125      85   #1010101          1100          #14       T
    126      86   #1010110          1100          #14       T
    127      87   #1010111          1100          #14       T
    130      88   #1011000          1100          #14       T
    131      89   #1011001          1100          #14       T
    132      90   #1011010          1100          #14       T
    133      91   #1011011          1100          #14       T
    134      92   #1011100          1100          #14       T
    135      93   #1011101          1100          #14       T
    136      94   #1011110          1100          #14       T
    137      95   #1011111          1100          #14       T
```

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```
    140      96   #1100000          1100          #14       T
    141      97   #1100001          1100          #14       T
    142      98   #1100010          1100          #14       T
    143      99   #1100011          1100          #14       T
    144     100   #1100100          1100          #14       T
    145     101   #1100101          1100          #14       T
    146     102   #1100110          1100          #14       T
    147     103   #1100111          1100          #14       T
    150     104   #1101000          1100          #14       T
    151     105   #1101001          1100          #14       T
    152     106   #1101010          1100          #14       T
    153     107   #1101011          1100          #14       T
    154     108   #1101100          1100          #14       T
    155     109   #1101101          1100          #14       T
    156     110   #1101110          1100          #14       T
    157     111   #1101111          1100          #14       T
    160     112   #1110000          1100          #14       T
    161     113   #1110001          1100          #14       T
    162     114   #1110010          1100          #14       T
    163     115   #1110011          1100          #14       T
    164     116   #1110100          1100          #14       T
    165     117   #1110101          1100          #14       T
    166     118   #1110110          1100          #14       T
    167     119   #1110111          1100          #14       T
    170     120   #1111000          1100          #14       T
    171     121   #1111001          1100          #14       T
    172     122   #1111010          1100          #14       T
    173     123   #1111011          1100          #14       T
    174     124   #1111100          1100          #14       T
    175     125   #1111101          1100          #14       T
    176     126   #1111110          1100          #14       T
    177     127   #1111111          1100          #14       T
                  ********
                  ********/( A(PIN #05) IS  CONB STACKFLOW (1)L
                  *******/( B(PIN #06) IS  CONH POWN SYNC (1)L
                  ******/( C(PIN #07) IS  CONI LCLK INT (1)L
                  *****/( D(PIN #04) IS  CONE STOP (1)L
                  ****/( E(PIN #03) IS  OPH RCD INT (1)L
                  ***/( F(PIN #02) IS  OPH XMIT INT (1)L
                  **/( G(PIN #01) IS  OPG WAIT L
                  */( H(PIN #15) IS  OPE T DEL (1)L
```

```
                                /( #Y4 (PIN # 9) CONF MPC #4 L
                                +/( #Y3 (PIN #10) CONF MPC #1 L
                                ++/( #Y2 (PIN #11) CONF MPC #2 L
                                +++/( #Y1 (PIN #12) CONF MPC #0 L
                                ++++      OCTAL
  OCTAL DECIMAL                 ++++      DATA
ADDRESS ADDRESS   HGFEDCBA      1001      #11       STKFL
    200     128   10000000      1010      #12       PWRF
    201     129   10000001      1001      #11       STKFL
    202     130   10000010      1011      #13       LCLK
    203     131   10000011      1001      #11       STKFL
    204     132   10000100      1010      #12       PWRF
    205     133   10000101      1001      #11       STKFL
    206     134   10000110      0101      #05       RCD
    207     135   10000111      1001      #11       STKFL
    210     136   10001000      1010      #12       PWRF
    211     137   10001001      1001      #11       STKFL
    212     138   10001010      1011      #13       LCLK
    213     139   10001011      1001      #11       STKFL
    214     140   10001100      1010      #12       PWRF
    215     141   10001101      1001      #11       STKFL
    216     142   10001110      0101      #05       RCD
    217     143   10001111      1001      #11       STKFL
    220     144   10010000      1010      #12       PWRF
    221     145   10010001      1001      #11       STKFL
    222     146   10010010      1011      #13       LCLK
    223     147   10010011      1001      #11       STKFL
    224     148   10010100      1010      #12       PWRF
    225     149   10010101      1001      #11       STKFL
    226     150   10010110      0111      #07       XMIT
    227     151   10010111      1001      #11       STKFL
    230     152   10011000      1010      #12       PWRF
    231     153   10011001      1001      #11       STKFL
    232     154   10011010      1011      #13       LCLK
    233     155   10011011      1001      #11       STKFL
    234     156   10011100      1010      #12       PWRF
    235     157   10011101      1001      #11       STKFL
    236     158   10011110      0010      #02       WAIT
    237     159   10011111      1001      #11       STKFL

    240     160   10100000      1010      #12       PWRF
    241     161   10100001      1001      #11       STKFL
    242     162   10100010      1011      #13       LCLK
    243     163   10100011      1001      #11       STKFL
    244     164   10100100      1010      #12       PWRF
    245     165   10100101      1001      #11       STKFL
    246     166   10100110      0101      #05       RCD
    247     167   10100111      1001      #11       STKFL
    250     168   10101000      1010      #12       PWRF
    251     169   10101001      1001      #11       STKFL
    252     170   10101010      1011      #13       LCLK
    253     171   10101011      1001      #11       STKFL
    254     172   10101100      1010      #12       PWRF
    255     173   10101101      1001      #11       STKFL
    256     174   10101110      0101      #05       RCD
    257     175   10101111      1001      #11       STKFL
    260     176   10110000      1010      #12       PWRF
    261     177   10110001      1001      #11       STKFL
    262     178   10110010      1011      #13       LCLK
    263     179   10110011      1001      #11       STKFL
    264     180   10110100      1010      #12       PWRF
    265     181   10110101      1001      #11       STKFL
    266     182   10110110      1110      #16       STOP
    267     183   10110111      1001      #11       STKFL
    270     184   10111000      1010      #12       PWRF
    271     185   10111001      1001      #11       STKFL
    272     186   10111010      1011      #13       LCLK
    273     187   10111011      1001      #11       STKFL
    274     188   10111100      1010      #12       PWRF
    275     189   10111101      1001      #11       STKFL
    276     190   10111110      0010      #02       WAIT
    277     191   10111111      1001      #11       STKFL
                  ++++++++
                  ++++++++/( A(PIN #05) IS  CONB STACKFLOW (1)L
                  +++++++/( B(PIN #06) IS  CONH POWN SYNC (1)L
                  ++++++/( C(PIN #07) IS  CONI LCLK INT (1)L
                  +++++/( D(PIN #04) IS  CONE STOP (1)L
                  ++++/( E(PIN #03) IS  OPH RCD INT (1)L
                  +++/( F(PIN #02) IS  OPH XMIT INT (1)L
                  ++/( G(PIN #01) IS  OPG WAIT L
                  +/( H(PIN #15) IS  OPE T DEL (1)L
```

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16

/(ΦY4 (PIN # 9) CONF MPC B4 L
*/(ΦY3 (PIN #10) CONF MPC B1 L
**/(ΦY2 (PIN #11) CONF MPC B2 L
***/(ΦY1 (PIN #12) CONF MPC B0 L

OCTAL ADDRESS	DECIMAL ADDRESS	HGFEDCBA	****	OCTAL DATA	
300	192	11000000	1001	#11	STKFL
301	193	11000001	1010	#12	PWRF
302	194	11000010	1001	#11	STKFL
303	195	11000011	1011	#13	LCLK
304	196	11000100	1001	#11	STKFL
305	197	11000101	1010	#12	PWRF
306	198	11000110	1001	#11	STKFL
307	199	11000111	0101	#05	RCD
310	200	11001000	1001	#11	STKFL
311	201	11001001	1010	#12	PWRF
312	202	11001010	1001	#11	STKFL
313	203	11001011	1011	#13	LCLK
314	204	11001100	1001	#11	STKFL
315	205	11001101	1010	#12	PWRF
316	206	11001110	1001	#11	STKFL
317	207	11001111	0101	#05	RCD
320	208	11010000	1001	#11	STKFL
321	209	11010001	1010	#12	PWRF
322	210	11010010	1001	#11	STKFL
323	211	11010011	1011	#13	LCLK
324	212	11010100	1001	#11	STKFL
325	213	11010101	1010	#12	PWRF
326	214	11010110	1001	#11	STKFL
327	215	11010111	0111	#07	XMIT
330	216	11011000	1001	#11	STKFL
331	217	11011001	1010	#12	PWRF
332	218	11011010	1001	#11	STKFL
333	219	11011011	1011	#13	LCLK
334	220	11011100	1001	#11	STKFL
335	221	11011101	1010	#12	PWRF
336	222	11011110	1001	#11	STKFL
337	223	11011111	0111	#07	XMIT
340	224	11100000	1001	#11	STKFL
341	225	11100001	1010	#12	PWRF
342	226	11100010	1001	#11	STKFL
343	227	11100011	1011	#13	LCLK
344	228	11100100	1001	#11	STKFL
345	229	11100101	1010	#12	PWRF
346	230	11100110	1001	#11	STKFL
347	231	11100111	0101	#05	RCD
350	232	11101000	1001	#11	STKFL
351	233	11101001	1010	#12	PWRF
352	234	11101010	1001	#11	STKFL
353	235	11101011	1011	#13	LCLK
354	236	11101100	1001	#11	STKFL
355	237	11101101	1010	#12	PWRF
356	238	11101110	1001	#11	STKFL
357	239	11101111	0101	#05	RCD
360	240	11110000	1001	#11	STKFL
361	241	11110001	1010	#12	PWRF
362	242	11110010	1001	#11	STKFL
363	243	11110011	1011	#13	LCLK
364	244	11110100	1001	#11	STKFL
365	245	11110101	1010	#12	PWRF
366	246	11110110	1001	#11	STKFL
367	247	11110111	1110	#16	STOP
370	248	11111000	1001	#11	STKFL
371	249	11111001			

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

SEQUENCE	
MODULE UTILIZATION	D_MU_MM11_L_1
BLOCK DIAGRAM	D_BD_MM11_L 2
TIMING DIAGRAM	D_TD_MM11_L_3
* MEMORY DRIVERS	E_SC_G231_0_1
* CONTROL & DATA LOOPS	E_CS_G110_0_1
STACK SCHEMATIC	E_CS_H213_0_1
STACK SCHEMATIC	E_CS_H214_0_1
BLOCK DIAGRAM	D-BD-MM11-S-2
8K MEMORY	A-PL-MM11-L-0

SEQUENCE
MFG. PRINT SET
MFG. TEST PRO. FOR MM11/K,L,M,S&SP
A-SP-MM11-L-5

THIS IS PRINT SET

UNIT VARIATIONS		PRINT SET TYPE
VARIATION	TITLE	MM11_L
MM11_K	4K 16 BIT 18 MIL MEMORY	X
MM11_L	8K 16 BIT 18 MIL MEMORY	X

* SPECIAL REVISION PRINTS ARE AVAILABLE ON "C" ETCH REV. MODULES.
CARE SHOULD BE TAKEN TO INSURE THAT PROPER PRINTS ARE ORDERED.

REVISIONS		
DATE	CHG. NO.	REV
9/72	MM11L-00001	A
11-72	MM11L00002	B
1-73	MISC-00107	C
2-73	MISC-00111	D
2-73	MISC-00112	E
2-73	MISC-00113	F
1-74	MM11L-3	H
6-75	MM11L-5	J

USED ON OPTION/MODEL
MM11_K
MM11_L

DRN.	DATE	1-25-72
CHK'D.	DATE	1-25-72
PROJ ENG.	DATE	1-25-72
PROD.	DATE	1-26-72
FIELD SERV.	DATE	1-26-72

SHEET 1 OF 3

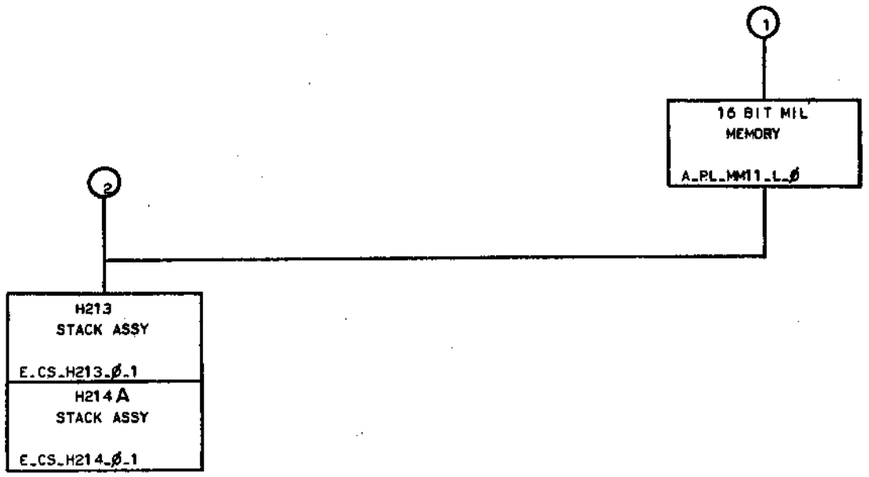
TITLE: 16 BIT 18 MIL MEMORY

SIZE	CODE	NUMBER	REV
B	DD	MM11_L	J

DIST

DRB 106

DEC 16-(325)-1062-1-N871



TITLE		SIZE	CODE	NUMBER	REV
16 BIT 18 MIL MEMORY	SHEET 2 OF 2	B	DD	MM11_L	J

DRB 107
DEC 16-(325)-1062-3-N871

ELECTRICAL

CUSTOMER PRINT SET MM11_L	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
X		1	D_MU_MM11_L_1	A	1	MODULE UTILIZATION	
X			D_BD_MM11_L_2	A	1	BLOCK DIAGRAM	
X			D_TD_MM11_L_3	#	1	TIMING DIAGRAM	
X			E_CS_G231_Ø_1	#	5	MEMORY DRIVER	
X			E_CS_G11Ø_Ø_1	#	5	CONTROL & DATA LOOPS	
X			D-BD-MM11-S-2	#	2	BLOCK DIAGRAM	
E					1		
X			A-PL-MM11-L-0		1	BK MEMORY	
			A-SP-MM11-1-7	A	4	PRELIM. ENG. SPEC. FOR MM11-K,L	
X		2	E_CS_H213_Ø_1	#	2	STACK SCHEMATIC	
X			E_CS_H214_Ø_1	#	2	STACK SCHEMATIC	
			A-SP-G109-0-8		1	G109,G110 CONT & DATA LOOP MFG. SPEC.	
			A-SP-G231-0-8		1	MEMORY DRIVER MFG. SPEC.	
			A-SP-MM11-L-4		1	MM11-K,-L,-S & SP MFG. TEST SPEC.	
	X		A-SP-MM11-L-5		29	MFG. TEST PRO. MM11/K,L,M,S & SP	

MECHANICAL

CUSTOMER PRINT SET MM11_L	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1	A_PL_MM11_L_Ø	A	1	MEMORY	
			A_PS_3010654_0_0			PURCHASE SPEC	
		2	B_DD_H214_Ø_1	#	2	STACK SCHEMATIC	
			B_DD_H213_Ø	#	2	STACK SCHEMATIC	
			A-PL_G645_Ø_-Ø		1	STACK BOARD	

TITLE		SIZE	CODE	NUMBER	REV
16 BIT 10 MIL MEMORY	SHEET 3 OF 3	8	DD	MM11_L	J

DRB 108

PIN SIDE VIEW OF BACKPLANE

THESE 2 SLOTS ARE UNIBUS WIRED ON ALL 3 CONNECTORS

H213, H214 OR H215 STACK (F,E,D,C) (QUAD 8 1/2) UNIBUS CONN OR TERM (A,B)

DRIVE (F,E,D,C,B,A)(HEX 8 1/2) G231

SENSE-CONTROL (F,E,D,B,C,A)(HEX 8 1/2) G110

REVISIONS			
CHK	CHANGE NO		REV
JB	MMIL-0000S		A
	2 Sheet 6 Oct 75		
	P DURANT		
	P Durant 10-15-75		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES

DECIMALS	ANGLES
.XXX ± .005 .XX ± .02 .X ± .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —//—

FINISH —//—

DRN P Durant DATE 1-14-74
CHK'D P Leigh DATE 1-24-74
ENG. P Durant DATE 1-24-72
PROJ. ENG. P Durant DATE 1-25-72
PROD. R K Peters DATE 1-27-75

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
MODULE UTILIZATION

NEXT HIGHER ASSY. B-DD-MMII-L

SCALE —

SHEET 1 OF 1

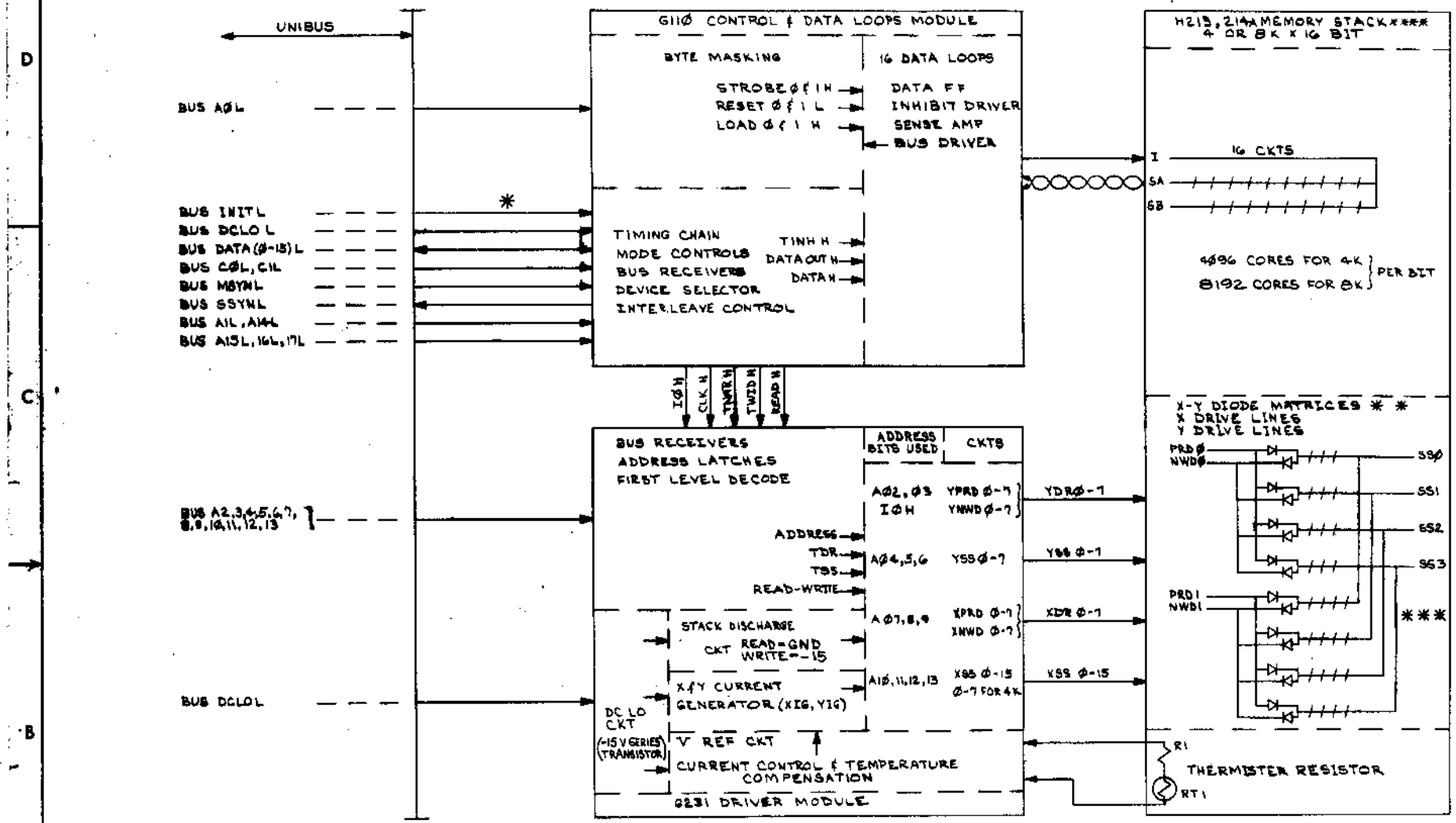
SIZE D | CODE MU | NUMBER MMII-L-1 | REV. A

DIST

DRAWING 40-522 18840

DEC FORM NO ORD 102-B

NOTES:
*1. ALL ARROWS SHOW SIGNAL FLOW DIRECTION.
**2. MATRIX SHOWN IS FOR ILLUSTRATION ONLY.
***3. ACTUAL MATRIX HAS { Y AXIS 8PRD, 8NRD, 8SS / X AXIS 4K 8PRD, 8NRD, 8SS / X AXIS 8K 8PRD, 8NRD, 16SS
****4. H214A IS A DESIGNATOR FOR EITHER AN H214 OR H215 MEMORY STACK, SEE E-CS-H214-Ø-1



REVISIONS			
CHK.	CHANGE NO.	REV
FJP	MM11L-00005	A
P. Gilbert	6 Oct 75	
P.DURANT		
Advanced 10-15-75		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1; ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE DUALITY ✓
MATERIAL
FINISH

DRN.	L Pacheco	DATE 11/19/74
CHK'D.	F Welch	DATE 1-15-75
ENG.	P Durant	DATE 1-25-75
PROJ. ENG.	P Durant	DATE 1-25-75
PROD.	R K Peterson	DATE 1-26-75

NEXT HIGHER ASSY. B-DD MM11-L
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

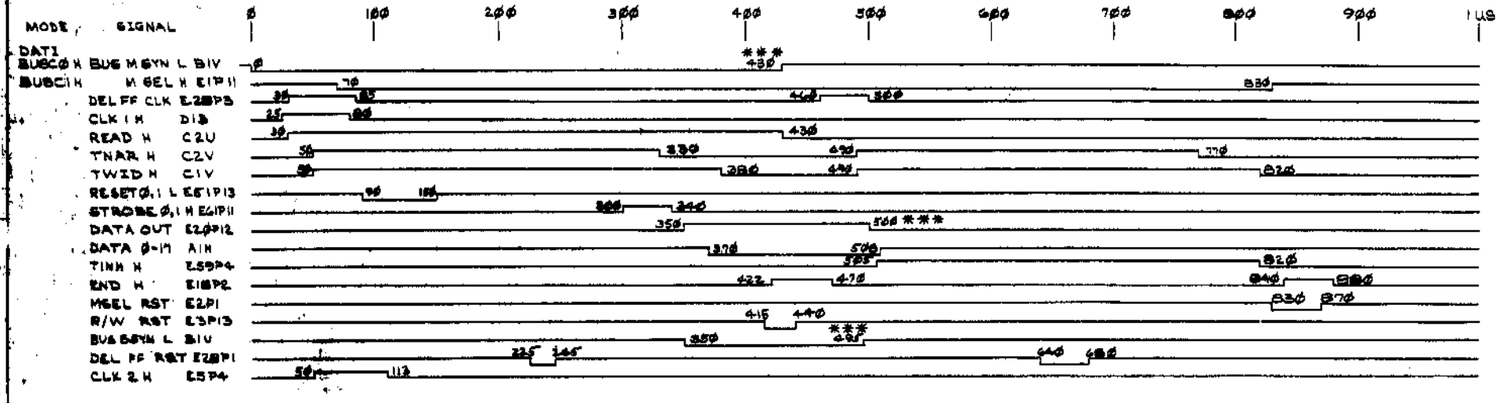
TITLE: BLOCK DIAGRAM (MM11-L)

SIZE	CODE	NUMBER	REV.
D	BD	MM11-L-2	A

DIST.

DEC FORM NO. DRD 303-B

NOTES:
1. ANY SIGNALS NOT SHOWN ON DATIP, DATO OR DATO B ARE AS SHOWN ON DATI TIMING.
* 2. RESET L AND STROBE H DO NOT OCCUR IN DATO MODE. THEY ONLY OCCUR FOR THE BYTE NOT BEING ADDRESSED IN DATO B MODE.
** 3. LOAD H OCCURS FOR BOTH BITS IN DATO MODE AND ONLY FOR THE ADDRESSED BYTE IN THE DATO B MODE.
*** 4. ACTUAL TIME DEPENDS ON BUS AND PROCESSOR DELAYS.
5. ALL SIGNALS ON G109 OR G110 MODULE



FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1; ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN J. Pedersen DATE 12/3/71
CHK'D J. Kotzel DATE 1-27-72
ENG. P.D. Umnet DATE 1-25-72
PROJ. ENG. P.D. Umnet DATE 1-25-72
PROD. K. Peterson DATE 1-27-72

NEXT HIGHER ASSY. B-DD-MM11-L
SCALE —
SHEET 1 OF 1

digital EQUIPMENT CORPORATION maynard, massachusetts

TITLE
TIMING DIAGRAM
(MM11-L, MM11-K)

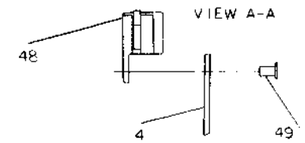
SIZE D | CODE TD | NUMBER MM11-L-3 | REV
DIST

REVISIONS	CHANGE NO.	CHK	REV.

DRAWING 40-823 ISSUED
DEC FORM NO
DRD 100-B

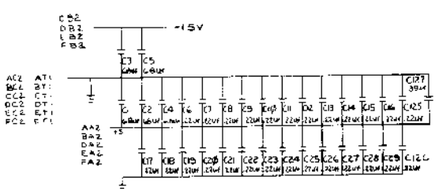
NOTE:
1. IC-008 TO BE MARKED "008X" OR "008"—WHITE DOT

VIEW A-A



COMPONENT SUBSTITUTION LIST

REV	ORIGINAL PART NO	ORIGINAL PART DESCRIPTION	ORIGINAL PART PART NO.	SUBSTITUTE PART DESCRIPTION	SUBSTITUTE PART PART NO
SEE NOTE 2	36	IC 4011 QUAD TRANSISTOR	1511102	IC 4000 QUAD TRANSISTOR	5510015
	42	IC 74H00	1910462	IC 74H00	1909056
	44	IC 74H04	1910463	IC 74H04	1909931



IC TYPE	GND	+5V
ONE END OF WIRE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.		
IC PIN LOCATIONS		

ITEM NO	WIRE	FROM PT	TO PT
JUMPER LIST			
	16	36-A	36-B
	16	35-A	35-B
	16	34-A	34-B
	16	33-A	33-B
	16	32-A	32-B
	16	31-A	31-B

REV	DESCRIPTION	DATE	APPROVED
ORIGINATED			

REV	REF DESIGNATION	DESCRIPTION	PART NO.
PARTS LIST			
ETCH BOARD REV	F		

FIRST USED ON OPTION/MODEL	MMII-L
2N2328	GAME
G534-B	NONE
3689-B	2N3440
22-15	2N2219
IN 823	NONE
DG72	IN 3655
DG64	IN 3686
DEC NO.	ECO NO.

SEMICONDUCTOR CONVERSION CHART			
	100B	NONE	
	2N3762	GAME	
	DEC NO.	ECO NO.	

B-DD-MMII-L

EQUIPMENT CORPORATION

TITLE: PDP-11 MEMORY DRIVER

DCS G231-0-1 REV R

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
4		SCREW, NYLON, #6 - 32	9008212	55
1	C127	CAP., 39 UF, 10V	1000978	56
1	C56	CAP., 680 PF, 100V, 5%	1000026	57
1	C52	CAP., 470 PF, 100V, 5%	1000024	58
2	J7, J8	JUMPER MACH. INSERTED	9009185	59
1	R178	RES., 4.7K, ¼W, 5%	1300447	60
2	J5, J6	#22 ANG., STRANDED TEFLON INSULATED	1700035-00	61

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF		X-Y COORDINATE HOLE LOCATION	K-CO-G231-B4	1
REF		ASSY DRILLING HOLE LAYOUT	E-AH-G231-05	2
REF		MODULE ECO HISTORY	E-AH-G231-05	3
1		ETCHED CIRCUIT BOARD	5009700	4
2	C51 C55	CAP., 39PF, 100V, 5% DM	1009010	5
A/R		WIRE JUMPER ANG. #22 SOLID	9107560-01	6
80	C30-C45, C57, C58, C60-C73 C75-C106, C109-C124	CAP. 1000PF, 100, 5% DM	1000042	7
36	C5-C29, C46, C47, C48, C50, C53, C54, C74, C107, C108, C125, C126, C59	CAP., 22UF, 50V, -20%, 80%	1010274	8
6	C1-C5, C49	CAP., 6.8 MFD, 35V, 20%	1000067	9
88	D1-D16, D19-D54, D56, D57, D62, D63, D68-D99	DIODE, D664	1100114	10
25	D17, D18, D55, D60, D61, D64-D67, D101-D116	DIODE, D672	1105275	11
1	D58	DIODE, 1N823, ZENOR	1105508	12
				13
41	R1-R8, R28-R35, R53-R60, R96, R157-R114, R142-R149	RES., 15Ω, ¼W, 5%	1300250	14
3	R78, R80, R98	RES., 330 ¼W, 5%	1300295	15
1	Q6	TRANS, 6534C	1503409-2	16
1	R93	RES 470 ¼W 5%	1300315	17
3	R84 R99, R100	RES., 1.5K, ¼W, 5%	1300391	18
1	R79	RES., 470 ¼W, 10%	1300317	19
4	R87, R88, R101, R102	RES., 1.5K, ½W, 5%	1300394	20
1	R95	RES., 2.2K, ½W, 5%	1300417	21
1	R174	RES., 10K, ¼W, 5%	1300479	22
1	R97	RES., 15K, ¼W, 5%	1300496	23
3	R136, R139, R148	RES., 5.1, ¼W, 5%	1309422	24
1	R83	RES., 750, ¼W, 5%	1301407	25
4	R9, R18 R105, R141	RES., 680, ¼W, 5%	1301424	26
2	R89, R105	RES., 2K, ½W 5%	1302387	27
2	R90, R94	RES 147, 1/8W, 1%	1302874	28
1	R91	RES., 909 1/8W, 1%	1302885	29
1	R92	RES., 1.78K, 1/8W, 1%	1302612	30
4	R85 R86, R 104 R103	RES., 16.9 6W, 1%	1310032	31
1	Q4	TRANSISTOR, 2219	1501801	32
3	Q2, Q3, Q7	TRANSISTOR, 1888	1502155	33
1	Q5	TRANSISTOR, 3800 A	1503100	34
1	Q1	TRANSISTOR, 6534 D	1503409	35
2	Q8, Q11	TRANSISTOR, 2N4258	1505321	36
4	Q9, Q10, Q12, Q13	TRANSISTOR, 2N3762	1509649	37
20	E1, E5, E7, E10, E21, E24, E26, E28, E30, E32, E33, E35, E36, E38, E39, E41, E42, E44, E45, E47	IC, 4011 QUAD TRANSISTOR	1511102 *	38
4	E9, E15, E16, E17	IC, DEC, 8640	1911469	39
20	T1-T20	TRANSFORMER	1609996	40
2	E22, E25	IC, 74H10	1909057	41
3	E2, E4, E27	IC, 1074H08	1910462 *	42
10	E3, E6, E23, E20, E31, E34, E37, E40, E43, E46	IC, 8251-1	1909854	43
1	L5	IC, 1074H04	1910463 *	44
7	E11-E14, E18, E19, E20	IC, 74H74	1909667	45
4		HEAT SINK	1210001	46
12		SPLIT LUGS	9008735	47
1		HANDLE	1210711-02	48
12		EYELET, #GS4-7, E.B. STIMPSON	9006732	49
4		TRANSIPAD	9007209	50
				51
				52
83	R11-R26, R37-R52, R61-R78, R123-R130, R158-R173, R77, R81, R27	RES 100 ¼W, 5%	1300229	53
4	W1-W4	STANDOFF THREADED, INSULATED ', X 3 8 LG.	9008213	54

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PDP-11 MEMORY DRIVER			
SIZE	CODE	NUMBER	REV.	
D	CS	G231 - Ø - 1	R	
SCALE		SHEET 2 OF 5	DIST.	

DEC FORM NO. 0160 127

DCSG231-0-1 R

SIZE FORM DCSG231-Ø-1 REV R

BUS A1Ø L BN2 — E16 8640 — BUS A11 L BN1 — E16 8640 — BUS A09 L BM1 — E15 8640 — A08 L BM2 — E15 8640 — BUS A07 L BL1 — E15 8640 — BUS A03 L BJ1 — E17 8640 — BUS A02 L BJ2 — E17 8640

CDL2 A01 H DA1

E9 8640 ×2

10K R174 ** +5V BP1 J3 J4 BUS A13 L

MD2 A10 H — MD2 A11 H — MD2 A09 H — MD2 A09 L — MD2 A08 H — MD2 A07 H — MD2 A03 H — MD2 A03 L — MD2 A02 H — MD2 A01 H

D01 CDL2 CLK 1 H

BUS A06 L BL2 — E15 8640 — BUS A12 L BP2 — E17 8640 — BUS A05 L BK1 — E16 8640 — BUS A04 L BK2 — E16 8640

8640 E9 ×2 — SPARE

MD2 A05 H — MD2 A04 H

74H74 SPARE E11

WRITE H — CDL2 READ H CU2 — CDL2 TNAR H CU2 — 1Ø74HØ4 — E4 ×4 — TWIDH — TSSH — 1Ø74HØØ (4 CKTS) — TNAR H

TP3

E22 74H1Ø ×4 — MD2Y51L — MD2Y5ØL — MD2X53L — MD2X52L

E25 74H1Ø ×3 — MD2X51L — MD2X5ØL

**

	J3	J4
4K	IN	OUT
8K	OUT	IN

*** ALL INPUTS ARE FROM UNIBUS (BUS xxxL) OR G109 OR G110 (CDL2XXXL)

*** CDL2 TWID H CV1 — CDL2 READ H CU2 — CDL2 TNAR H CV2 — WRITE H — E2 ×3 — T.P.2 — MD2 TDR H — 1Ø74HØØ (3 CKTS.)

1Ø74HØ4 — DS1 — Q1 6534 — 100Ω E27 — 330Ω R78 — 47Ø Ω E29 — 330Ω R80 — DS2 DS3 DS4 DS5 DS6 DS7 — Q2 1ØØB — STACK DISCHARGE MD2SD — Q3 1ØØB — 100Ω RB1 — C59 .22μF — REF — EC1 EA1 — 196Ω 300Ω — 6.2V — C48 .22μF DS8 — R96 — C47 .22μF — R94 147Ω — C49 5.8 — R97 15K — R98 330Ω — R27 100Ω — Q4 2219 — Q6 6534C — R92 1.76K J2 — R91 909Ω — R99 470Ω — R95 2.2K — R176 4.7K — Q7 1ØØB — C58 .22μF — -15V — X-Y REFFERENCE SUPPLY

CDL2 TWID H CV1 — 1Ø74HØ4 — 1Ø74HØ4 — TWID H — BF21 R96 150Ω — Q5 3ØØB — C55 39PF — Q11 4258 — R181 1.5K — 1.5K R104Ø — C56 680PF — DG3 DG2 — .22μF C53 — .22μF C54

+5V — 750Ω R83 — 1.5K R84 — Q8 4258 — C51 39 PF — 47Ø PF C52 — R85 16.9Ω — R86 16.9Ω — Q9 Q10 3762 — TR4 — J5 — MD2IY Y AXIS TO WRITE SWITCHES AND READ DRIVERS — R87 1.5K — R88 1.5K — DG0 — DG1 — R89 1K — -15V

T.P.1 — CDL2 READ H CV2 — 1ØH74Ø4 — MD2 READ L

R103 16.9Ω — R104 16.9Ω — Q12 Q13 3762 — MD2IX X AXIS TO WRITE SWITCHES AND READ DRIVERS — DG4 — R105 1K — DG5 — J6 — -15V — J7

* THIS CIRCUIT IS ON STACK BOARD

REVISIONS	REV	CHANGE NO	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
XXX ± .005	±0° 30'
XX ± .02	
X ± .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL — FINISH

		DATE
DSN	R Gaskey	9-24-71
CHKD	[illegible]	1-21-72
ENG.	P.D. Lupsett	1-25-72
PROJ. ENG.	A. Dussault	1-25-72
PROG.	R.R. Peterson	1-26-72

NEXT HIGHER ASSY.

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: PDP-11 MEMORY DRIVER

SIZE	CODE	NUMBER	REV.
D	CS	G231-Ø-1	R

SCALE — SHEET 5 OF 5 — DIST.

DEC FORM NO DRD 102-B

FROM CURRENT LOOP M02IX — D18 — R106 680Ω +5V — WRITE SWITCHES — READ SWITCHES

R36 5.1Ω −15V C74 .22 UF

M02 XS3L M02 XS2L M02 XS1L M02 XS0L — M02A11H — M02A10H — E46 E37 E34 E31 8251-1 D3 D1 D0 D2

FK1 XG15 FJ2 XG14 FJ1 XG13 FH2 XG12 FH1 XG11 FF2 XG10 FF1 XG09 FE2 XG08

FE1 XG07 FD2 XG06 FD1 XG05 FC1 XG04 CT2 XG03 CS2 XG02 CS1 XG01 CR2 XG00

M02A09H M02TDRH 1074H00 E27 M02A08H M02A07H — E46 E43 8251-1

FV2 XPRD7 FT2 XNWD7 FU2 XPRD6 FS2 XNWD6 FS1 XPRD5 FR2 XNWD5 FR1 XPRD4 FP2 XNWD4 FP1 XPRD3 FN2 XNWD3 FN1 XPRD2 FM2 XNWD2 FM1 XPRD1 FL2 XNWD1 FL1 XPRD0 FK2 XNWD0

WRITE DRIVER — READ DRIVER — D101 D102 D103 D104 D105 D106 D107 D108 — −15V — +5V — R139 5.1Ω — D82 — C107 .22 UF

M02 READ L — M02SD STACK DISCHARGE — +5V

ALL INPUTS FROM G231 SHEET2 (M02)
ALL OUTPUTS GO TO MEMORY STACK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX ±.005 .XX ±.02 .X ±.1 — ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL — FINISH

DRN. E Carbone 10-1-71
CHK'D. E Delgado 1-21-72
ENG. D Durant 1-25-72
PROJ. ENG. T Durant 1-25-72
PROD. R K Pellerin 1-26-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE PDP-11 MEMORY DRIVER

NEXT HIGHER ASSY.
SIZE D CODE CS NUMBER G231-0-1 REV. R
SCALE
SHEET 4 OF 5
DIST.

REVISIONS REV CHANGE NO CHK

DEC FORM NO DRD 102-B

FROM CURRENT LOOP MD2 IY — D17 — R9 680Ω — +5V

READ SWITCHES — WRITE SWITCHES

MD2 YS1L — MD2 A05H — MD2 A04H — E28 8251-1 (D3, D1, D0, D2)

MD2 YS0L — MD2 A05H — MD2 A04H — E23 8251-1 (D3, D1, D0, D2)

CR1 YS07 — CP2 YS06 — CP1 YS05 — CN2 YS04 — CN1 YS03 — CM2 YS02 — CM1 YS01 — CL1 YS00

J8 — −15V — C46 .22 UF

100Ω TYP — 1000PF TYP — 130Ω TYP — D666 TYP

MD2 READ L — +5V

MD2 SD — STACK DISCHARGE

FROM CURENT LOOP MD2 IY — D67 — R141 680Ω — +5V

WRITE DRIVER — READ DRIVER

MD2 TDRH — MD2 A03H — E27 1074H00 — MD2 A02H — MD2 A01H — E8 8251-1 (D3, D1, D0, D2)

MD2 TDRH — MD2 A03L — E27 1074H00 — MD2 A02H — MD2 A01H — E3 8251-1 (D3, D1, D0, D2)

−15V — CK1 YPRD7 — CL2 YNWD7 — CJ1 YPRD6 — CK2 YNWD6 — CH1 YPRD5 — CJ2 YNWD5 — CF1 YPRD4 — CH2 YNWD4 — +5V — CE1 YPRD3 — CF2 YNWD3 — CD1 YPRD2 — CE2 YNWD2 — CC1 YPRD1 — CD2 YNWD1 — CA1 YPRD0 — CB1 YNWD0

5.1Ω R140 — −15V — C108 .22 UF

100Ω TYP — 1000PF TYP — 150Ω TYP — D672 TYP

ALL INPUTS FROM G231 SHEET 2 (MD2)
ALL OUTPUTS TO MEMORY STACK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX ± .005, .XX ± .02, X ± .1; ANGLES ± 0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓. MATERIAL —. FINISH —.

DRN	P Carberry	DATE 10/5/71
CHKD	Y Hight	DATE 1-21-72
ENG	R Dimmick	DATE 1-25-72
PROJ ENG.	P.G. Wrinn	DATE 1-25-72
PROD	Ric Peterson	DATE 1-26-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: PDP-11 MEMORY DRIVER

NEXT HIGHER ASSY. —

SIZE D | CODE CS | NUMBER G231-0-1 | REV. R

SCALE —

SHEET 5 OF 5

DIST.

REVISIONS: REV. | CHANGE NO. | CHK.

DEC FORM NO ORD 102-B

SIZE D | CODE CS | NUMBER G231-0-1 | REV. R

58 REF

5 REF

75 SEE NOTE 3

COMPONENT SUBSTITUTION LIST			
ORIGINAL PART		SUBSTITUTE PART	
DESCRIPTION	PART NO	DESCRIPTION	PART NO
DIODE	1901610 OR 5	DIODE	1901610 OR 15
TRANSISTOR	1854849 OR 1	TRANSISTOR	1854849 OR 15

NOTES:
1. R125 AND R129 MAY BE CHANGED AT FINAL TEST. RESISTANCE RANGE WILL BE FROM 5.11K TO 14.7K.
2. TWISTED WIRE PAIR WILL RUN UNDER THE THREE BLK WIRE JUMPER WIRES THAT RUN SIDEWISE AND LAYED BETWEEN THE LINE OF DE726 DS9 TIP AND DS2 AND THE LINE OF 4 LINK RESISTOR PAIR R65 AND R61.
3. USE SLEEVING 9107279-00 OVER PIN 1 OF DL1
4. DSC 7435 (1911219-01) ACCEPTABLE SUBSTITUTE FOR 7430. WARNING: DO NOT USE TAPE 5 IN PLACE OF DEC 7430.
5. TRANSIPACS USED UNDER Q1 THRU Q16 AND Q22.

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	FSCM
		MISC WIRE GREEN	9105140-55	77
15		TRANSIPAC	1105284	76
40		SOLDER WIRE .015 DIA	9107127-00	75
11	W1-W8, W10, W12	WIRE #22 AWG INSULATED	9105182	74
1	R126	RES 825 1/4 W 5%	1301779	73
AR	SEE NOTE 5	TRANSIPAC, BLACK, WHITE TYPE	9105120-05	72
2	E15, E36	C-DEC 7404	1940931	71
2	R115, R125	RES 5.11K 1/8 W 1% SEE NOTE 1	1905858	70
1	R128	RES 1.5K 1/4 W 5%	1902394	69
1	R127	RES 150 1/2 W 5%	1900249	68
1	C153	CER 27 PF 100V	1900733	67
9	C22,23,24,25,31,33,34,154	CAP 3.4UF, 10V, 10% S. TANT	1900064	66
1	C148	CAP 18PF 100V	1901808	65
16	R37-R52	RES 2K 1/4W 5%	1302388	64
1	E64	I.C. DEC 7404	9104136	63
2	R116, R118	RES 220 1/4W 5%	1300527	62
AR		WIRE, JUMPER #18 AWG STR. BLK INSUL	1100069	61
41		SOLDER LUGS	9000735	60
4		SCREW, NYLON 4-40 X 3/8	9000401-04	59
1		HANDLE 1559	1210111-2	58
1	E33	IC DEC 7400	1900888	57
1	E37	IC DEC 7413	1900851	56
1	E28	IC DEC 7438	1900868	55
1	E8	IC DEC 8001	1909814	54
1	E1	IC DEC 7408	1900882	53
1	E14	IC DEC 7402	1900834	52
1	E34	IC DEC 7412	1910201	51
2	E13, E24	IC DEC 8242	1909712	50
7	E41, E47, L53, L58, E14, E34, E38	IC DEC 7437	1910881	49
1	E27	IC DEC 7411	1900797	48
1	E16	IC DEC 74153	1900883	47
8	E40, E43, E48, E49, E52, E55, E58, E61	IC DEC 7420	1167067	46
4	E44, E59, E56, E62	IC DEC 7405	1909746	45
11	E39, E42, E45, E51, E54, E57, E60, E63, E5, E6, E48	IC DEC 7474	1910887	44
8	E18-E22, E9	IC DEC 1438	1910219-01	43
6	E8 THRU 12, E33, E7, E29	IC DEC 8640	1911455	42
2	R17, E35, E31	IC DEC 7440	1903278	41
4	E4, E6, E8, E10	8 FUN 5.22 QUAD LINE	1909996	40
4	E7, E9, E11, E12	XFMR C27431	1908787-01	39
2	E2, E28	IC DEC 7674	1903547	38
1	DL1	DELAY LINE DL5182	1909928	37
1	DL2	DELAY LINE DD150	1904487	36
16	Q1 THRU Q16	2STR 2N3724	1910780	35
2	Q19, Q21	2STR DEC 10C00	1910781	34
2	Q18, Q22	2STR 2N2787	1909849-01	33
5	R107 THRU R112	RES 4.7K 1/4 W 5%	1906427	32
2	R105, R106	RES 100 1/4 5%	1900297	31
2	R103, R113	RES 330 1/4 5%	1900295	30
16	D65 THRU D80	DIODE 1N4148	1910032-01	29
32	R1 THRU R32	RES 75 1/8W 1% MF	1909859	28
1	R181	RES 200 1/4 5%	1901472	27
1	R187	RES 580 1/4 5%	1901680	26
4	R58, R59, R60, R61	RES 4.99K 1/8W 1% MF	1905406	25
3	R121, R122, R124	RES 1K 1/4 5%	1900305	24
2	R123, R129	RES 510 1/4 5%	1900298	23
4	R104, R113, R120	SCREW, 8-32 X 1/4	9000748	22
2	R117, R119	RES 1000 1/4W 5%	1900229	21
76	R33 THRU R96	RES 82 1/4 W 5%	1901781	20
4	R53, R57, R58, R62	RES 10K 1/8W 1% MF	1903190	19
1	R115	RES 5.11K 1/8W 1% MF	1903045	18
1	R120	RES 3K 1/2 W, 10% POT	1909143-03	17
1	D33	DIODE 1N4152	1910781	16
53	D1 THRU D32, D35-D, 36, 37	DIODE 1N4152	1910781	15
10	D55 THRU D64	DIODE D664	1150134	14
19	C58, C60 THRU C69, C120 THRU C124, C126, C148	CAP .01 UF 100V 20% CER	80-01818-00	13
24	C30 THRU C54, C143, C146, C147, C149, C150, C151, C152, C154, C155, C156, C157, C158, C159, C160, C161	CAP .22 UF 50V CERAMIC	1010274	12
16	C49 THRU C64	CAP 3300PF 50V ±.5% CERAMIC	1210072-10	11
10	C57, THRU C82,	CAP 1000PF 1000 5% DISC	10-00041	10
9	C21, C23, C25, C30, C32, C34, C36, C39	CAP 120 PF 1000 5% DM	10-00018	9
8	C85 THRU C92	CAP 47UF 20V 20% TANT.	10-04814	8
9	C144, C128, C127, C148, C85, C27, C79, C96, C152	CAP 68UF 35V 10% TANT	10-05308	7
17	C45, C77-C76	CAP .1MF 100V 5% DM	1000813	6
12		EYELET 65-6-7	9006732	5
REF		MODULE LOC HISTORY	B-BD-0110-6-6	4
REF		ASSY COMPONENT HOLE LAYOUT	B-BD-0110-6-5	3
REF		X-Y COORDINATE HOLE LAYOUT	B-BD-0110-6-4	2
REF		ETCHED CIRCUIT BOARD	9003709	1

ETCH BOARD REV 24

PARTS LIST

DRAWN		EQUIPMENT CORPORATION	
CHK'D		TITLE	CONTROL & DATA LOOPS
ENGR			CDL 1
MFG		SIZE	NUMBER
APPD		C	ECSGII0-0-1
SCALE		SHEET 1 OF 4	

B-DD-MMII-L

1N751A2	SAME		
DE72	1N 3613		
DGG4	1N 3606		
DEC NO.	EIA NO.	DEC NO	EIA NO

SEMICONDUCTOR CONVERSION CHART

7475	2	5
5328	9	16
8640	1	8

IC TYPE | GND | +5V

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

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

VIEW A-A

FIRST USED ON OPTIMUS MMII-L

W5 2,3,4,5,6 PROGRAM MEMORY BANK LOCATION. CUT JUMPER FOR BUS A LINE LOW (ASSERTED) WHEN BANK SELECTED. W5 MUST BE IN WHEN USED AS 8K BANK

	W9	W10
4K	IN	OUT
8K	OUT	IN

MEMORY BANK SIZE

* USE INSULATED JUMPERS IN POSITIONS SHOWN BY DOTTED LINES WHEN ENTER/LEAVING

BUS A13 L, BUS A16 L, BUS A15 L, BUS A17 L, BUS A01 L, BUS A14 L

DEVICE SELECT CIRCUIT (DSELH)

HIGH WHEN MEMORY BANK IS SELECTED

250NS TOTAL DELAY
25NS/TAP

DELAY FF RESET

CDL2 TWID & CV1

TNAR CV2 CDL2

CDL2 CLK1H

30NS

WRITE RESTART L

SSYN RESET

READ H CDL2

MSEL RESET

TO IN DRIVERS SSYN RESET
TINH0H BUS INIT L
TINH1H

WRITE RESTART ONE SHOT CKT

INIT L

STROBE SPLIT LVL T.P.1

CDL2 TO SENSE AMPS -5V

-5V SUPPLY

-15V

+8V

AV1 TP5

AU1 TP6

BUS A00 L, BUS C00 L, BUS C01 L

PROTECT LOW

BYTE MASKING LOGIC

LOAD 0 H TO DATA 74H74 F.F.

LOAD 1 H

A0 LATCH

C0 LATCH

C1 LATCH

RESET 1 L CDL2 TO DATA 74H74 FF

RESET 0 L CDL2

STROBE 1 H CDL2 TO SENSE AMPS (MS26)

STROBE 0 H CDL2 (=30 TWP)

BUS SSYN L

CDL2 DATA OUT H TO BUS DRIVERS

	W12	W13	W14	W15	W16	W17
G110	OUT	OUT	OUT	OUT	IN	IN

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = .1 ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. T. Carberry DATE 1/20/72
CHK'D. Dalaglio DATE 1/25/72
ENG. P.Durant DATE 1/25/72
PROJ. ENG. P.Durant DATE 1/25/72
PROD. R.K. Peterson DATE 1-31-72
NEXT HIGHER ASSY. B-DD-MMII-L
SCALE
SHEET 2 OF 4

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL & DATA LOOPS CDL 2

SIZE D | CODE CS | NUMBER G110-0-1 | REV. S

DIST

REVISIONS | REV. | CHANGE NO. | CHK.

DEC FORM NO

1-0-0110 CS D

CDL2 -5V
+5V

CDL2 LOAD ØH

CDL2 RESET ØL

Ø3SB EY2 — Ø3SA EY1 — T6 — D3 — D4 — R4 — R3 — C1 39 PF — EG1 7528 — 75Ω
Ø4SB ES2 — Ø4SA ES1 — T9 — D1 — D2 — R2 — R1 — C2 39PF — EG1 7528 — C19
Ø1SB EP2 — Ø1SA EP1 — T8 — D7 — D8 — R8 — R7 — C3 39 PF — EG3 7528 — C30
Ø5SB EN2 — Ø5SA EN1 — T9 — D5 — D6 — R6 — R5 — C4 39PF — EG3 7528
Ø2SB EL2 — Ø2SA EL1 — T7 — D11 — D12 — R12 — R11 — C5 39 PF — EG5 7528
Ø6SB EK2 — Ø6SA EK1 — T7 — D9 — D10 — R10 — R9 — C6 39PF — EG5 7528 — C21
Ø3SB EH2 — Ø3SA EH1 — T7 — D15 — D16 — R14 — R13 — C7 39 PF — EG2 7528 — C32
Ø7SB EF2 — Ø7SA EF1 — T7 — D13 — D14 — R16 — R15 — C8 39PF — EG2 7528

SENSE TERMINATIONS (FROM CORES)

SENSE AMPS

EG2 7404 — 19.6Ω R56 4.99K — R55 .22 UF — 3.3K
EG2 7404 — R58 4.99K — R57 .22 UF — 3.3K

JUMPER W16 (#30 TWP)
CDL2 STROBE Ø H
+5 REF
FA2

E56 7404 — E56 7404 — E62 7404 — E62 7404

INVERTERS

E11 8640 — E63 74H74 — E22 DEC 7438 — BUSDØØL
E11 8640 — E63 74H74 — E22 DEC 7438 — BUSDØ4L
E11 8640 — E60 74H74 — E22 DEC 7438 — BUSDØ1L
E11 8640 — E60 74H74 — E22 DEC 7438 — BUSDØ5L
E10 8640 — E57 74H74 — E21 DEC 7438 — BUSDØ2L
E10 8640 — E57 74H74 — E21 DEC 7438 — BUSDØ6L
E10 8640 — E54 74H74 — E21 DEC 7438 — BUSDØ3L
E10 8640 — E54 74H74 — E21 DEC 7438 — BUSDØ7L
E7 8640 — E39 74H74 — E18 DEC 7438 — AMI BUS PAL

DATA LATCHES

BUS DRIVERS

INH BASE DRIVERS

CDL2 DATA OUT H

CDL2 TINH ØH

ØØIN EU2 — R66 — Q1 — C67 1000PF — RB6 — D57 — D37
Ø4IN ER2 — R65 — Q2 — C69 1000PF — RB5 — D58 — D40
ØIIN ER1 — R67 — Q4 — C68 1000PF — RB4 — D56 — D39
Ø5IN EM2 — R68 — Q8 — C70 1000PF — RB3 — D55 — D41
ØZIN EM1 — R70 — Q5 — C71 1000PF — R90 — D61 — D62
Ø6IN EJ2 — R69 — Q6 — C73 1000PF — R89 — D42 — D44
ØTIN EJ1 — R71 — Q8 — C72 1000PF — R88 — D60 — D43
Ø7IN EE2 — R72 — Q7 — C74 1000PF — R87 — D59 — D45

13.0Ω — C49 3300 PF — E59 7437 — T10 — 16-09996 D664
C50 3300 PF — E59 7437
C52 3300PF — E59 7437
C51 3300PF — E59 7437
C53 3300PF — E53 7437
C54 3300PF — E53 7437
C56 3300 PF — E53 7437
C55 3300PF — E53 7437

AC1 AE1 AD2 AF2 AD1 AF1 AE2 AH2

-15V
+5V

INHIBIT DRIVERS (TO CORES)

NOTE

1 ALL SIGNALS FROM UNIBUS (BUS DØØL TO BUS DØ74), G110 SHEET 2 (CDL2) OR STACK (00'5A,E TO 0759,B AND ØØIN TO Ø7IN)

FIRST USED ON OPTION/MODEL: MMII-L	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX = .005, .XX = .02, .X = .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓. MATERIAL —. FINISH —.

DSN E Gadsby	DATE 11/8/72
CHKD J Ralph	DATE 1-15-73
ENG P Bullard	DATE 12/7/72
PROJ ENG P Dukeshire	DATE 12/7/72
PROD R K Peterson	DATE 11/3/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL & DATA LOOPS CDL3

NEXT HIGHER ASSY. B-DD-MMII-L

SIZE D | CODE CS | NUMBER G110-0-1 | REV. S

SCALE —

SHEET 3 OF 4

DIST

REVISIONS: REV. | CHANGE NO | DWN

DEC FORM NO

1-0-0119 SC d 2

DATE CODE 3000 7215

NUMBER CSG110-0-1

DRAWING

NOTE

1 ALL SIGNALS FROM UNIBUS (BUS UCB6-D15L) G110 SHEET 2 (CDL2) OR STACK (Ø8SA,B TO 15SA,B AND Ø8IN TO 15IN)

SENSE TERMINATIONS (FROM CORES)

SENSE AMPS

JUMPER

CDL 2 STROBE 1 H

+5 REF

FA2

INVERTERS

BUS RECEIVERS

DATA LATCHES

BUS DRIVERS

INH BASE DRIVERS

INHIBIT DRIVERS (TO CORES)

CDL 2 DATA OUT H

CDL 2 TINH 1 H

FIRST USED ON OPTION/MODEL: MMII-L	QTY.	DESCRIPTION	PART NO.	ITEM NO.	
		PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES, ±TOLERANCES	DRN.	DATE 11/1/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS		
DECIMALS: .XXX = ±.005, .XX = ±.02, .X = ±.1 — ANGLES: ±0° 30'	CHK'D.	DATE 1-20-72	TITLE: CONTROL & DATA LOOPS		
REMOVE BURRS AND BREAK SHARP CORNERS/ SURFACE QUALITY ✓	ENG.	DATE 1/25/72			
	PROJ. ENG.	DATE 1/25/72			
	PROD.	DATE 1-31-72	CDL 4		
MATERIAL: //	NEXT HIGHER ASSY. B-DD-MMII-L		SIZE/CODE D CS	NUMBER G110-0-1	REV. S
FINISH: //	SCALE //				
	SHEET 4 OF 4		DIST.		

REVISIONS: REV. | CHANGE NO | CHK

DEC FORM NO DRD 105-B

1-0-0115 SC a

NOTES:

1. ALL COMPONENT LEADS TO BE LESS THAN 1/16 INCHES LONG ON SIDE TWO OF MODULE
2. ON REPAIR MODULES IF CORE TYPE USED IS 175 REPLACEMENT MUST BE 175 CORE. IF 375 CORE TYPE IS USED REPLACEMENT MUST BE 375 CORE.

COMPONENT SUBSTITUTION LIST

MODULE	ORIGINAL PART DESCRIPTION	ORIGINAL PART PART NO	SUBSTITUTE PART DESCRIPTION	SUBSTITUTE PART PART NO	REF DES
M213	2501-0016 DIODE	1910010-00	2501-0016 DIODE	1910010-00	
M213	2501-0016 DIODE	1910010-00	2501-0016 DIODE	1910010-00	
M213	2501-0016 DIODE	1910010-00	2501-0016 DIODE	1910010-00	

LEGEND

MODULE CONN.	BACK PANEL LOCATION
A	C
B	D
C	E
D	F

SEE NOTE 1

SIDE ONE

SIDE TWO

1	RT1	THERMISTOR 300 5%	1300188	14
1	R2	RESISTOR, E1 1/4W 2%	1300443	13
1	R1	RESISTOR 196 1/8W 1%	1305186	12
8		EYELET	2006738	12
4		HAND-E, GREEN	9004339-04	10
1		NAME PLATE	9009238	11
2		JUMPER	5009239	10
26		4036-CORE MATS (STRAIN)	5010-78	9
				8
80		SCREW, MACH, PHILLIPS 4-40 X 3/16	9009235	7
80		SCREW, P.H. NYLON 4-40 X 1/4 LG.	9009236	6
80		STANDOFF, THREADED 4-40 X 3/4 LG.	9008157	5
1		SUBSTRATE	52-4836	4
1		COVER PLATE	55-1030-02	3
16	E1-E5, E7-E12, E22, E23 E1-E4, E6, E7, E10, E11	I.C. DIODE 2501	1910010	2
1		PLANER MEMORY BOARD	5009713	1
QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

EQUIPMENT CORPORATION

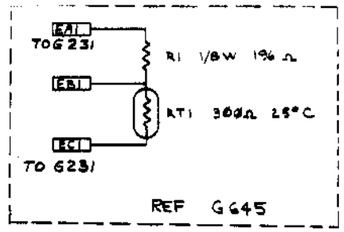
STACK SCHEMATIC (4K 16BIT)

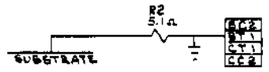
SIZE J

DRAWING NO. M213-D

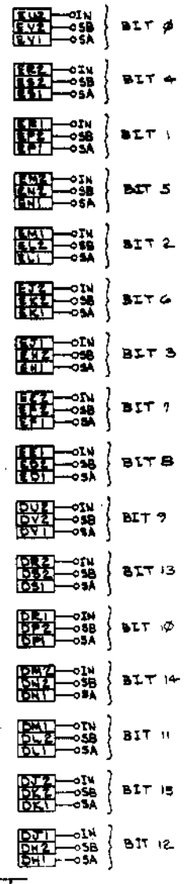
SCALE

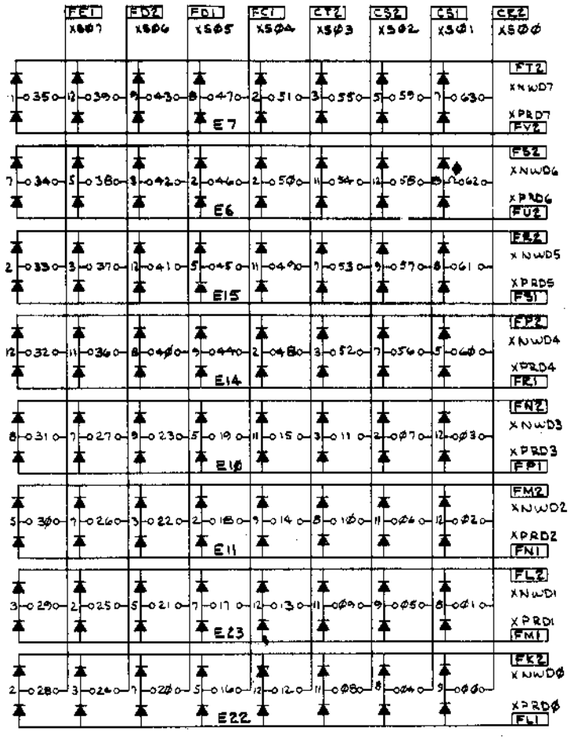
REV



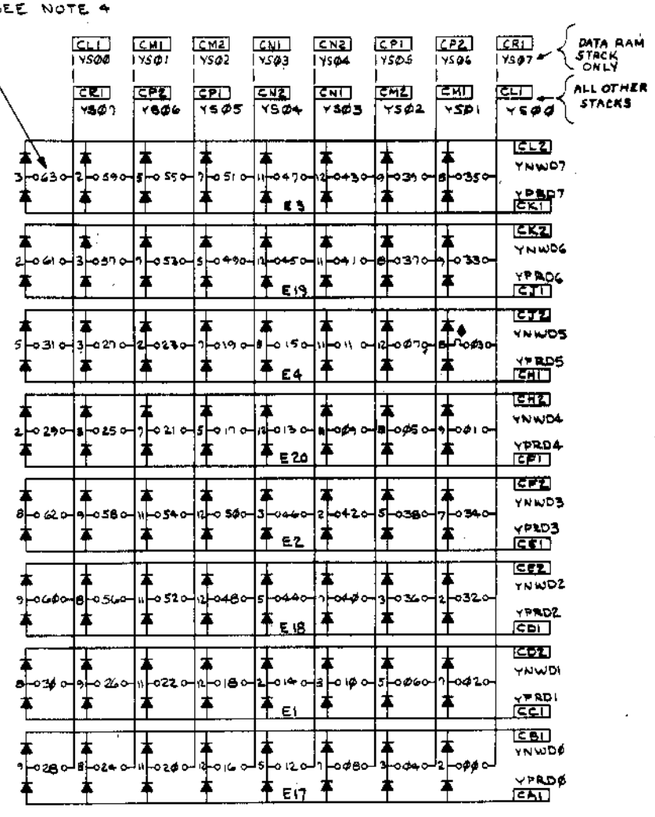


NOTES
1. UNLESS OTHERWISE SPECIFIED: IC'S ARE TO BE DEC PART # 19/0010
2. INDICATES STACK LINE NUMBER. (TYP)
3. ♦ INDICATES CURRENT LOOP.
4. ⊸ INDICATES MAGNET WIRE TERMINATION (SOLDERED TO P.C. PAD).





SEE NOTE 4



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1; ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN	P Blakeney	DATE 12/1/71
CHKD	L Kotzer	DATE 1-25-72
ENG	P Bunnell	DATE 1-25-72
ENGG. ENG.	P Bunnell	DATE 1-25-72
PROD.	M K Peterson	DATE 1-26-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: STACK SCHEMATIC 4K X 16 BIT

NEXT HIGHER ASSY. B-DD-MM11-_-Ø

SIZE D CODE CS NUMBER H213-Ø-1 REV. J

SCALE — SHEET 2 OF 2 DIST.

REV.	REVISIONS	CHANGE NO	CHK
J			

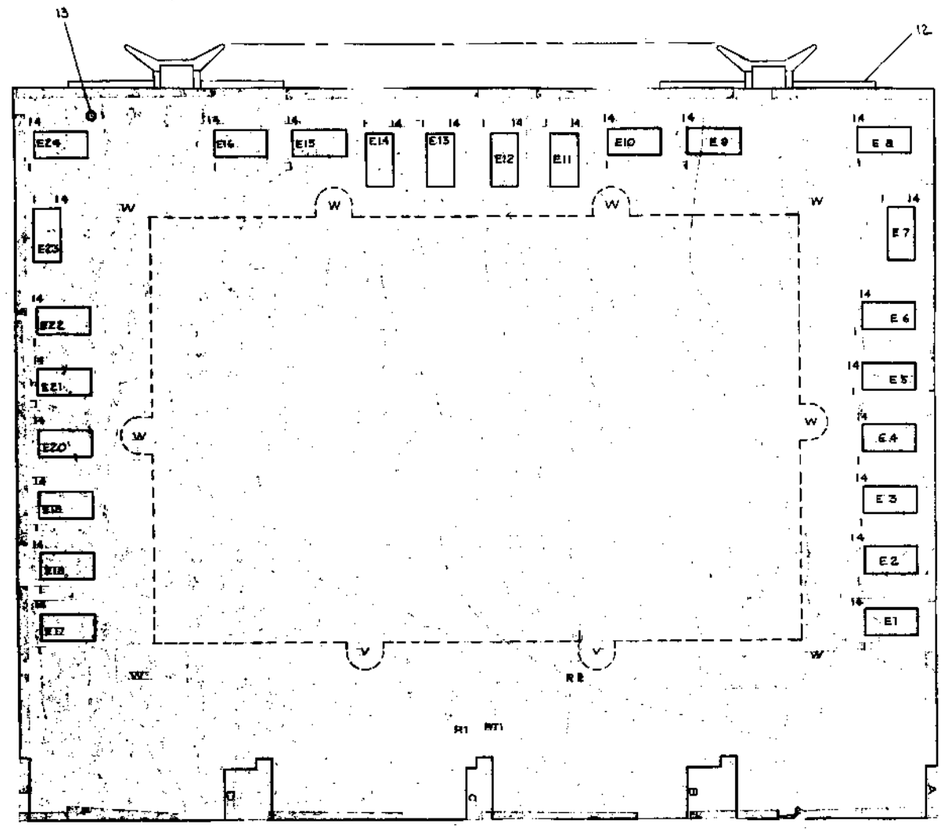
DRAWING 40-823 19040 DEC FORM NO DRD 185-B

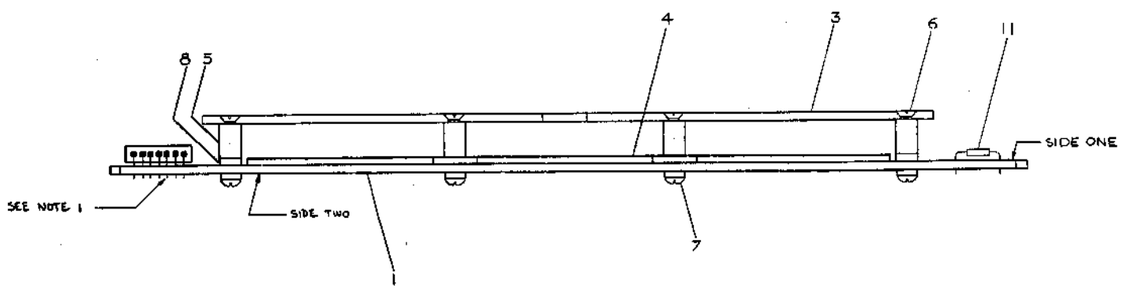
B CS H213-Ø-1

NOTES:
1. ALL COMPONENT LEADS TO BE LESS THAN 1/16 INCHES LONG ON SIDE TWO OF MODULE

MODULES	COMPONENT SUBSTITUTION LIST ORIGINAL PART DESCRIPTION	PART NO.	SUBSTITUTE PART DESCRIPTION	PART NO.	NOTE
H214, H215, H216	2501-00 - DIODE	19 10010-00	2501-01 DIODE	19 10010-01	2
H214, H215, H216	2501-00 - DIODE	19 10010-00	2501-02 DIODE	19 10010-02	2
H214	2501-00 - DIODE	19 10010-00	2501-03 DIODE	19 10010-03	2

2: FOR AMPEX STACKS H214, H215, AND H216 WITH CORE TYPE 324-1899, R1 SHOULD BE 121 OHMS.
3 ON REPAIR MODULES, IF 175 CORE TYPE IS USED - REPLACEMENT CORE MUST BE 175 TYPE. IF 375 CORE TYPE IS USED. - REPLACEMENT CORE MUST BE 375 TYPE.





LEGEND	
MODULE CONN	BACK PANEL LOCATION
A	C
B	D
C	E
D	F

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE NOTED ABOVE		

IC PIN LOCATIONS

FROM	PIN	TO	PIN

JUMPER LIST

QTY H216	QTY H215	QTY H214	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM
-	-	-	RT1	THERMISTOR 200 2%	1309785	16
-	-	-	R2	RESISTOR 5.1 1/4W 5%	1303422	15
-	-	-	R1 (SEE NOTE 2)	RESISTOR 196 1/8W 1%	1302956	14
8	8	8		EYELET	9006736	13
4	4	4		HANDLE, GREEN	9008837-01	12
2	2	2		JUMPER,	9025139	11
-	-	-		NAME PLATE	9008838	10
16	16	16		332-CORE MATS (STRUMS)	DIBM3-75	9
						8
10	10	10		SCREW, FLAT HEAD	20028332	7
10	10	10		SCREW, FLAT HEAD	20028316	6
10	10	10		STANDOFF, THREADED	20028372	5
-	-	-		SUBSTRATE	50-20236	4
-	-	-		COVER PLATE	85-0201-02	3
24	24	24	E1 THRU E24	I.C. DIODE E501	19-10010	2
-	-	-	-	PLANER MEMORY BOARD	5009713	1

PARTS LIST

ETCH BOARD REV

DEC NO.	ECA NO.

SEMICONDUCTOR CONVERSION CHART

MM11-L

B-DD-MM11-L-B

ORIGINATED

DEC NO.	ECA NO.

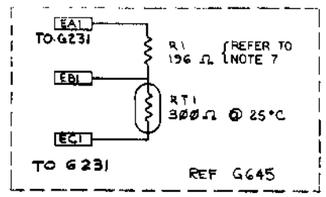
SHEET #2

H216 H215 H214 NOTE #3

AMPEX DIGITAL EQUIPMENT CORPORATION

SCHEMATIC H214-8KX16BIT H214A-8KX16BIT H215-8KX8BIT H216-8KX8BIT

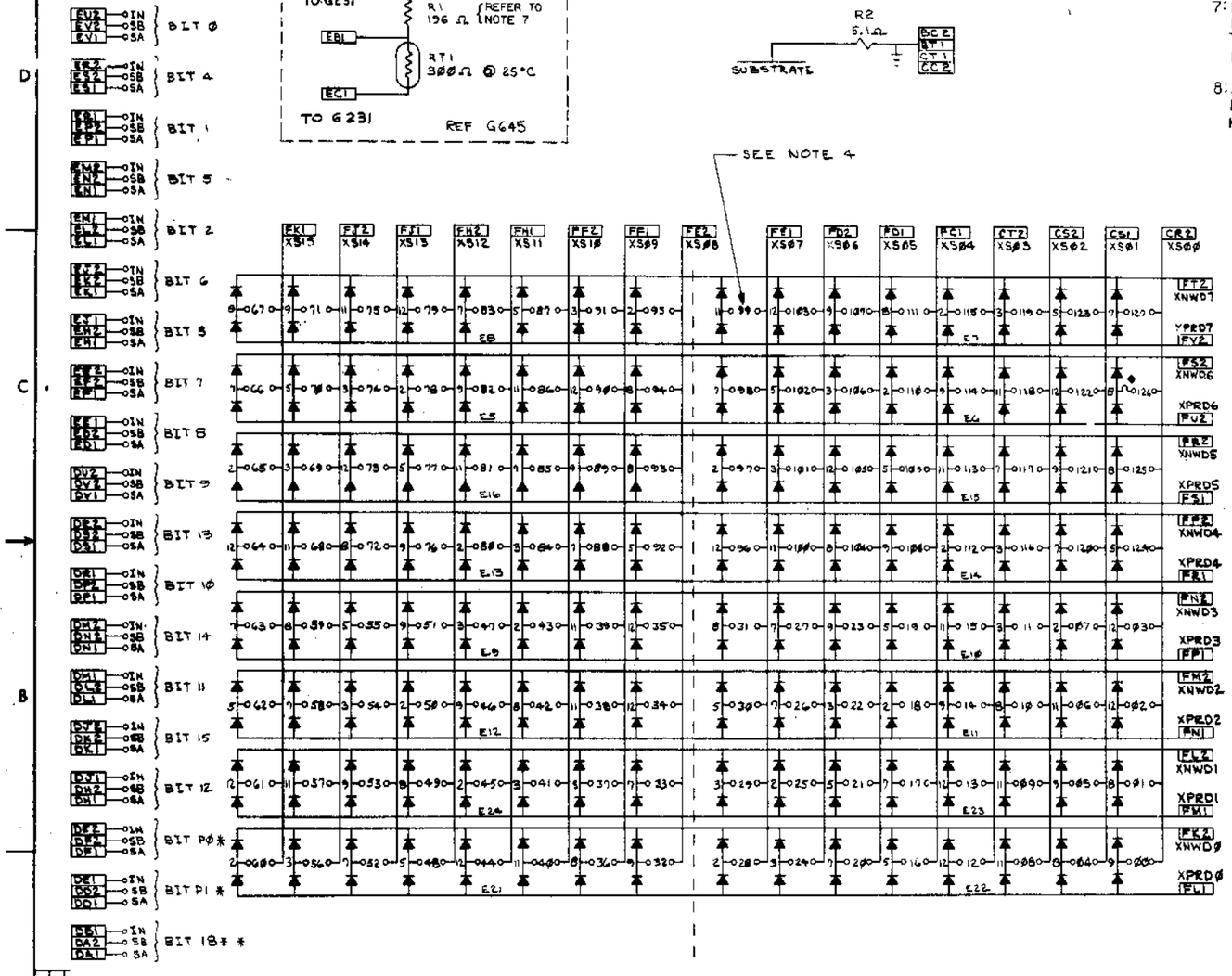
FICS H214-8-1



7: FOR AMPEX STACKS H214, H215, AND H216 WITH CORE TYPE 324-1899, R1 SHOULD BE 121 OHMS.

8: AN H214A IS DEFINED TO BE EITHER AN H214 OR H215 MODULE.

NOTES:
1. UNLESS OTHERWISE SPECIFIED: IC's E1-E24 ARE TO BE DEC PART# 19100I0
2. INDICATES STACK LINE NUMBER. (TYP)
◆ 3. INDICATES CURRENT LOOP
—o 4. INDICATES MAGNET WIRE TERMINATION (SOLDERED TO PC. PAD).
* 5. FOR H215 / H216 ONLY. P0=PA, P1=PB
** 6. FOR H216 ONLY.



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN B Cadwell	DATE 11/22/71	digital EQUIPMENT CORPORATION
CHK'D K Holyoke	DATE 1-25-72	
ENG. B Cadwell	DATE 2-7-72	TITLE STACK SCHEMTIC (H214-8K X 16 BIT) (H214A-8K X 16 BIT) (H215-8K X 18 BIT) (H216-8K X 19 BIT)
ENGR ENG. B Cadwell	DATE 12-3-72	
PROD. R H Peterson	DATE 1-26-72	
NEXT HIGHER ASSY. B-DD-MM11-L-0		SIZE D CODE 03 NUMBER H214-0-1 REV. -
SCALE		SHEET 1 OF 2 DIST.

REVISIONS			
DWK	CHANGE NO.		REV.

NOTES:
*1. ALL ARROWS SHOW SIGNAL FLOW DIRECTION.
**2. MATRIX SHOWN IS FOR ILLUSTRATION ONLY.
***3. ACTUAL MATRIX HAS { Y AXIS 8 PRD, 8 NRD, 8 SS
X AXIS 4K 8 PRD, 8 NRD, 8 SS
X AXIS 8K 8 PRD, 8 NRD, 16 SS
****4. H214A IS A DESIGNATOR FOR EITHER AN H214 OR H215 MEMORY STACK, SEE E-CS-H214-0-1.

UNIBUS

BUS A0L

BUS INITL
BUS DCLO L
BUS DATA(0-13) L
BUS C0L, C1L
BUS MSYNL
BUS SSYNL
BUS A1L, A1HL
BUS A15L, 16L, 17L

BUS A2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

BUS DCLOL

G110 CONTROL & DATA LOOPS MODULE

BYTE MASKING

16 DATA LOOPS

STROBE 0 / 1 H
RESET 0 / 1 L
LOAD 0 / 1 H

DATA FF
INHIBIT DRIVER
SENSE AMP
BUS DRIVER

TIMING CHAIN
MODE CONTROLS
BUS RECEIVERS
DEVICE SELECTOR
INTERLEAVE CONTROL

TINH H
DATAOUT H
DATA H

I0H, CLK H, TINH H, TWR2 H, READ H

BUS RECEIVERS
ADDRESS LATCHES
FIRST LEVEL DECODE

	ADDRESS BITS USED	CKTS
I0H	A02, 03	YPRD0-7, YNWD0-7
ADDRESS	A04, 5, 6	YSS0-7
TDR, TDS, READ-WRITE	A07, 8, 9	XPRD0-7, XNWD0-7
STACK DISCHARGE CKT READ=GND WRITE=-15V	A10, 11, 12, 13	X&S 0-15, 0-7 FOR 4K

X (Y CURRENT GENERATOR (X16, Y16)

DC LO CKT (-15 V SERIES TRANSISTOR)

V REF CKT

CURRENT CONTROL & TEMPERATURE COMPENSATION

2231 DRIVER MODULE

YDR 0-7
YSS 0-7
XDR 0-7
XSS 0-15

H213, 214 MEMORY STACK ****
4 OR 8K X 16 BIT

16 CKTS

1
SA
SB

4096 CORES FOR 4K
8192 CORES FOR 8K
PER BIT

X-Y DIODE MATRICES * *
X DRIVE LINES
Y DRIVE LINES

PRD 0
NWD 0
SS 0
SS 1
SS 2
SS 3
PRD 1
NWD 1
***

R1
RT1
THERMISTER RESISTOR

REVISIONS			
DWN	CHANGE NO	REV	
[illegible]	MMII-L-00005	A	
[illegible]			
P DURANT			
[illegible] 10-14-72			

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-S		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

DRN [illegible] DATE 11/9/72
CHK'D [illegible] DATE 12-12-72
ENG [illegible] DATE 1-29-73
PROJ. ENG. [illegible] DATE 2-15-73
PROD. [illegible] DATE 2-8-73

MATERIAL
FINISH

NEXT HIGHER ASSY. B-DD-MMII-S
SCALE
SHEET 1 OF 2

digital EQUIPMENT CORPORATION

TITLE: BLOCK DIAGRAM

SIZE D | CODE BD | NUMBER MMII-S-2 | REV. A

DIST.

DEC FORM NO [illegible]

MEMORY BANK	MACHINE ADDRESS	W1 ✳	W5 A13 △	W6 □ A14 OR A81	W4 A15	W3 A16	W2 A17L	△ W9 4K-8K	W10	W7-8 INTER LEAVE □	W11 PROTECT
0-4K	000000-017776	IN	IN	IN	IN	IN	IN			WHEN USED AS A 4K OR A NON INTER-LEAVED 8K JUMPERS ARE W8 W7	WHEN W11 IS INSTALLED IT MAKES THE MEMORY DO A DATI RE-GARDLESS OF THE STATE OF THE CBB AND CB1 LINES
4-8K	020000-037776		OUT	IN	IN	IN	IN				
8-12K	040000-057776		IN	OUT	IN	IN	IN				
12-16K	060000-077776		OUT	OUT	IN	IN	IN				
16-20K	100000-117776		IN	IN	OUT	IN	IN				
20-24K	120000-137776		OUT	IN	OUT	IN	IN				
24-28K	140000-157776		IN	OUT	OUT	IN	IN				
28-32K	160000-177776		OUT	OUT	OUT	IN	IN				
32-36K	200000-217776		IN	IN	IN	OUT	IN				
36-40K	220000-237776		OUT	IN	IN	OUT	IN				
40-44K	240000-257776		IN	OUT	IN	OUT	IN				
44-48K	260000-277776		OUT	OUT	IN	OUT	IN				
48-52K	300000-317776		IN	IN	OUT	OUT	IN				
52-56K	320000-337776		OUT	IN	OUT	OUT	IN				
56-60K	340000-357776	IN	IN	OUT	OUT	OUT	IN			WHEN USED AS AN 8K INTERLEAVED (2-8K BANKS REQUIRED) JUMPERS ARE W8 W7	
60-64K	360000-377776		OUT	OUT	OUT	OUT	IN				
64-68K	400000-417776		IN	IN	IN	IN	OUT				
68-72K	420000-437776		OUT	IN	IN	IN	OUT				
72-76K	440000-457776		IN	OUT	IN	IN	OUT				
76-80K	460000-477776		OUT	OUT	IN	IN	OUT				
80-84K	500000-517776		IN	IN	OUT	IN	OUT				
84-88K	520000-537776		OUT	IN	OUT	IN	OUT				
88-92K	540000-557776		IN	OUT	OUT	IN	OUT				
92-96K	560000-577776		OUT	OUT	OUT	IN	OUT				
96-100K	600000-617776		IN	IN	IN	OUT	OUT				
100-104K	620000-637776		OUT	IN	IN	OUT	OUT				
104-108K	640000-657776		IN	OUT	IN	OUT	OUT				
108-112K	660000-677776		OUT	OUT	IN	OUT	OUT				
112-116K	700000-717776		IN	IN	OUT	OUT	OUT				
116-120K	720000-737776		OUT	IN	OUT	OUT	OUT				
120-124K	740000-757776		IN	OUT	OUT	OUT	OUT				
DEVICE USED AS 4K MEMORY △		IN	X	X	X	X	X	IN	OUT		

NOTES:

✳1. W1 IS FOR TEST PURPOSES ONLY

△2. WHEN USED AS AN 8K BANK, W5 AND W10 MUST BE INSTALLED AND W9 MUST BE OUT
WHEN USED AS A 4K BANK W10 MUST BE OUT, W9 MUST BE IN AND W5 DETERMINES THE BANKS LOCATION ON THE BUS.

□3. THIS MEMORY CAN ONLY BE INTERLEAVED AS 16K (TWO ADJACENT, CONTIGUOUS ADDRESS 8K BANKS). WHEN NOT INTERLEAVED (SOLID JUMPERS ON W7 AND W8) THE DEVICE SELECT IS AS SHOWN IN TABLE 1 USING A14. WHEN TWO 8K BANKS ARE INTERLEAVED W7 AND W8 MUST BE AS SHOWN IN DOTTED LINES IN TABLE 1. ALSO IN TABLE 1, AB1 NOW GOES TO THE DEVICE SELECTOR GATE CONTROLLED BY W8. THE TWO BANKS MUST HAVE W6 IN ON ONE BANK AND OUT ON THE OTHER.

4. FIGURE 1 SHOWS THE PHYSICAL LOCATION OF THE JUMPERS ON THE G119 IF THE MODULE WERE LYING ON THE PRINT WITH COMPONENTS UP AND CONNECTORS TOWARD BOTTOM OF PRINT. W7 & W8 ARE AS SHOWN SCHEMATICALLY ON D-CS-G119-0-1

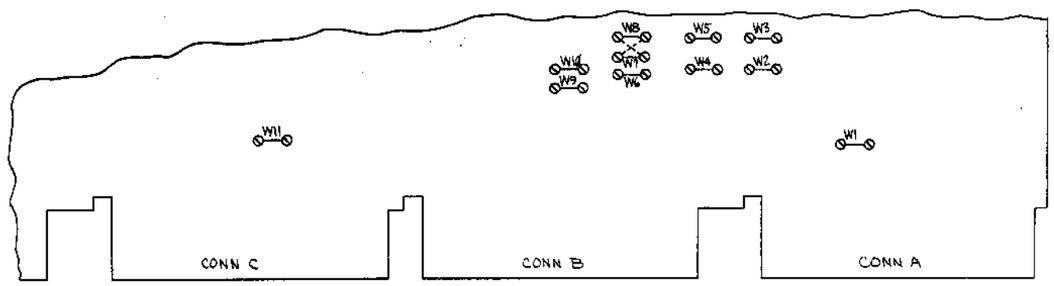


FIGURE 1
G119 JUMPER PHYSICAL LOCATION
SEE NOTE 4

REVISIONS		
CHK	CHANGE NO.	REV.

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-S		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1; ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN E. Lafferty DATE 5/5/72
CHK'D E. Talbot DATE 5/22/72
ENG. DATE
PROM ENG. DATE 7-72
PROD. DATE

NEXT HIGHER ASSY. MM11-S
SCALE
SHEET 2 OF 2

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: BLOCK DIAGRAM (DEVICE DECODING)

SIZE D | CODE BD | NUMBER MM11-S-2 | REV. A | DIST.

DEC FORM NO 1PD 100-A

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

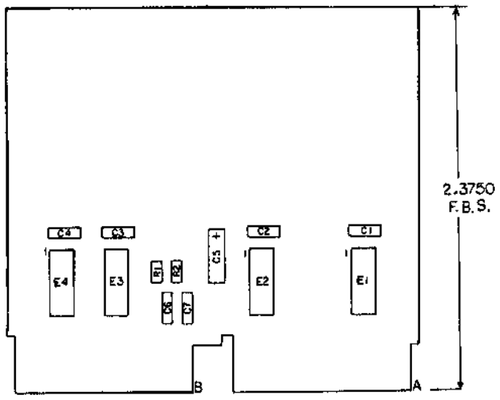
MADE BY F. CARBERRY	CHECKED J. Murphy	SECTION
DATE 1/5/72	DATE 1-25-72	
ENG P. Duvall	PROD R.K. Patterson	ISSUED SECT.
DATE 1/25/72	DATE 1-26-72	

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY/VARIATION MM11-L	MM11-K
1	~~B-DD~~-H213-Ø	H213 MEMORY STACK (4K X 16)		1
2	E-CS-G231-Ø-1	MEMORY DRIVER	1	1
3	E-CS-G110-Ø-1	CONTROL & DATA LOOPS	1	1
4	E-CS-H214-Ø-1	H214A MEMORY STACK (8K X16)	1	

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
MEMORY, MM11		A	PL	MM11-L-Ø	A	MM11-00005
	SHEET 1 OF 1	DIST.				

DEC FORM DEC 16-(325)-1031-N870
DRA 110

NOTES:



REF				
REF		X-Y COORDINATE HOLE LOCATION	K-CO-M930-0-4	1
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M930-0-5	2
REF		MODULE ECO HISTORY	B-MH-M930-0-6	3
1		ETCHED CIRCUIT BOARD	5008698	4
4	C1 THRU C4	CAP .22 µF 50V CER	1010274-01	5
2	C6,C7	CAP 1000pF 250V 20% DISC	1000043	6
1	C5	CAP 39µF 10V 10% TANT	1000076	7
2	R1,R2	RES 383Ω 1/4W 1%	1305125	8
2	E1,E4	28 RES DIVIDER NETWORK	1312628-00	9
2	E2,E3	25 RES DIVIDER NETWORK	1312628-01	10

IC TYPE	GND	+5V

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

IC PIN LOCATIONS

QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL: M930

ETCH BOARD REV. E-P3

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

K. SARGENT 7.11.75 ORIGINATED

REVISIONS: E

DRN. J. CARTER 7-9-75
CHK'D L. Meyers 7-16-75
ENG. [illegible] 10-2-75
PROJ. ENG. [illegible] 10-2-75
PROD. [illegible] 10-3-75

NEXT HIGHER ASSY

SCALE —

SHEET 1 OF 2

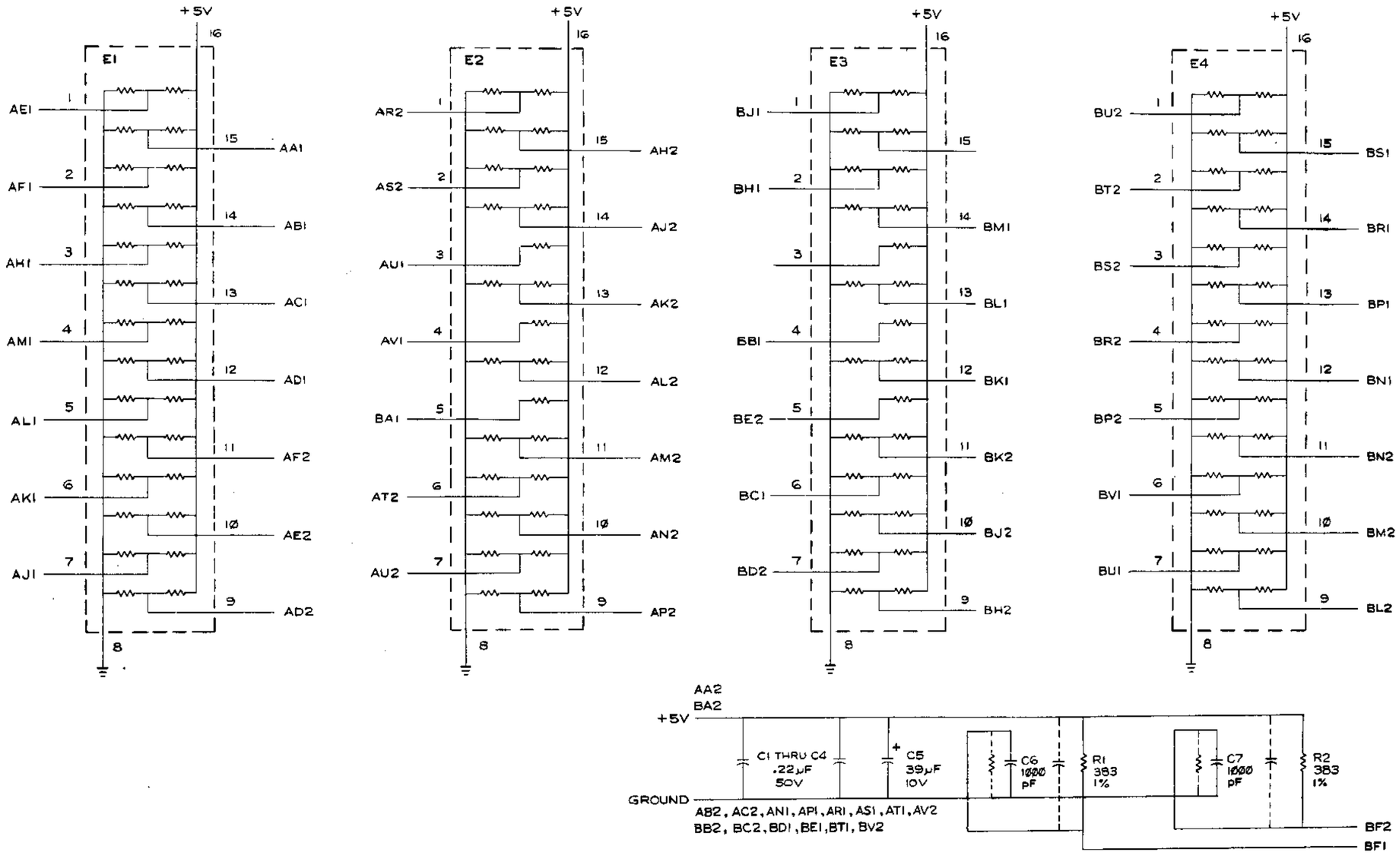
digital

TITLE: BUS TERMINATOR

SIZE D | CODE CS | NUMBER M930-0-1 | REV. E

DIST.

SIZE D | CODE CS | M930-0-1 | REV. E



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
BUS TERMINATOR	D	CS	M930-0-1	E
SCALE	SHEET 2 OF 2	DIST.		

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

	SEQUENCE	SEQUENCE
CONSOLE ASSY	D-UA-KY11-J-Ø	
CONSOLE ASSY (PL)	A-PL-KY11-J-Ø	
JUMPER POWER	B-IA-7409730-0-0	
I/O CABLE	C-UA-BCØ8R-Ø3-Ø	
CIRCUIT SCHEMATIC	D-CS-5409766-Ø-1	
ETCH BOARD ASSY	E-IA-5409766-0-0	

UNIT VARIATIONS

VAR	TITLE	PRINT SET KY11-J
KY11-JA	CONSOLE ASSY 11/Ø5	X
KY11-JB	CONSOLE ASSY 11/1Ø	X
KY11-JC	CONSOLE ASSY GT4Ø	X
KY11-JF	CONSOLE ASSY UNICHANNEL 15	X
KY11-JD	CONSOLE ASSY 11/Ø5 (10.5)	X
KY11-JE	CONSOLE ASSY 11/1Ø (10.5)	X

REVISIONS	REV	CHG. NO.	DATE
	A	KY11J-00004	2/74
	B	KY11J-00005	3/74
	C	KY11J-00006	3/74
	D	KY11J-00007	3/74

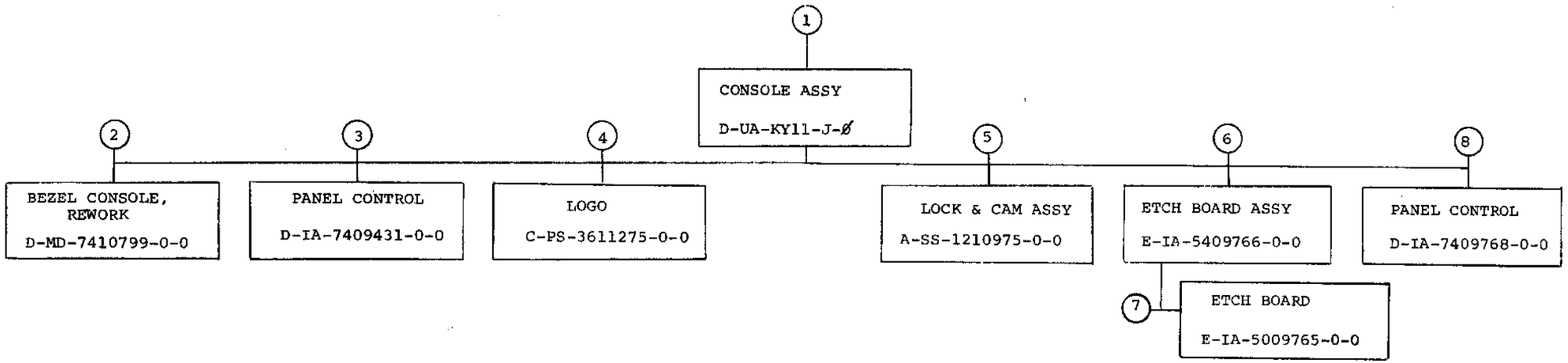
USED ON OPTION/MODEL	
11/Ø5	

SHEET 1 OF 3

DRN. J.CAHILL	DATE 4-23-3	TITLE: CONSOLE ASSY
CHK'D. J.CAHILL	DATE 4-23-3	
PROJ ENG.	DATE 8-29-73	
PROD.	DATE 8-29-73	SIZE B / CODE DD / NUMBER KY11--J / REV D
FIELD SERV.	DATE 9-26-73	DIST

DRB 106

DEC 16-(325)-1062-1A-R972



TITLE		SIZE	CODE	NUMBER	REV
CONSOLE ASSY	SHEET 2 OF 3	B	DD	KY11-J	D

DRB 107
DEC 16-(325)-1062-3-N871

ELECTRICAL

CUSTOMER PRINT SET KY11-J	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X		1	D-UA-KY11-J-Ø	N	1	CONSOLE ASSY	
X			A-PL-KY11-J-Ø	N	2	CONSOLE ASSY (PL)	
X			B-IA-7409730-0-0	#	1	JUMPER POWER	
X			C-UA-BCØ8R-Ø3-Ø	#	1	I/O CABLE	
X		6	E-IA-5409766-0-0	#	1	ETCH BOARD ASSY	
X			D-CS-5409766-Ø-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409766-Ø-6		1	MODULE ECO HISTORY	
		7	E-IA-5009765-0-0		1	ETCH BOARD	

MECHANICAL

CUSTOMER PRINT SET KY11-J	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	D-UA-KY11-J-Ø	N	1	CONSOLE ASSY	
			A-PL-KY11-J-Ø	N	2	CONSOLE ASSY (PL)	
			C-MD-7409534-0-0		1	ACTUATOR (REWORK)	
			B-IA-7409444-0-0		1	DETENT	
			C-UA-BCØ8R-Ø3-Ø		1	I/O CABLE	
			B-MD-7409867-0-0		1	EXTENDED LEAF REWORK (ACTUATOR)	
			B-MD-7409868-0-0		1	SWITCH ADAPTER PLATE	
			C-MD-7411728-0-0		1	KEY LOCK SWITCH, REWORK	
		2	D-MD-7410799-0-0		1	BEZEL CONSOLE REWORK	
			J-PS-1210922-0-0		1	BEZEL CONSOLE CASTING	
		3	D-IA-7409431-0-0		1	PANEL CONTROL	
			C-SS-7409431-0-1		1	SILK SCREEN (MAGENTA)	
			C-SS-7409431-0-2		1	SILK SCREEN (BLK) REAR	
			C-SS-7409431-0-3		1	SILK SCREEN (11Ø5) VERMILLION	
		4	C-PS-3611275-0-0		1	LOGO	
			A-SS-3611275-0-1		1	SILK SCREEN	
			A-SS-3611275-0-2		1	SILK SCREEN	
			A-SS-3611275-0-3		1	SILK SCREEN	
			A-SS-3611275-0-4		1	SILK SCREEN	
			A-SS-3611275-0-5		1	SILK SCREEN	
		5	A-PS-1210975-0-0		1	LOCK & CAM ASSY	
		6	E-IA-5409766-0-0		1	ETCH BOARD ASSY	
		7	E-IA-5009765-0-0		1	ETCH BOARD	
		8	D-IA-7409768-0-0		1	PANEL CONTROL	
			C-SS-7409768-0-1		1	SILK SCREEN	
			C-SS-7409768-0-2		1	SILK SCREEN	
			C-SS-7409768-0-3		1	SILK SCREEN	

CUSTOMER PRINT SET CODES

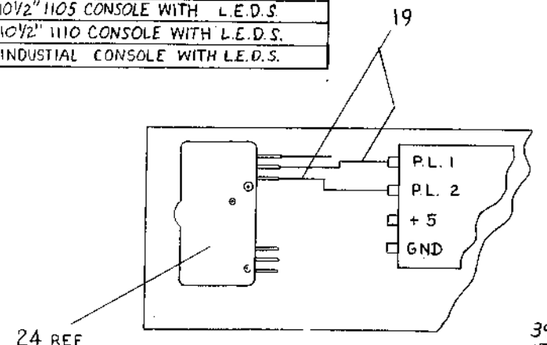
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE		SIZE	CODE	NUMBER	REV
CONSOLE ASSY	SHEET 3 OF 3	B	DD	KY11-J	D

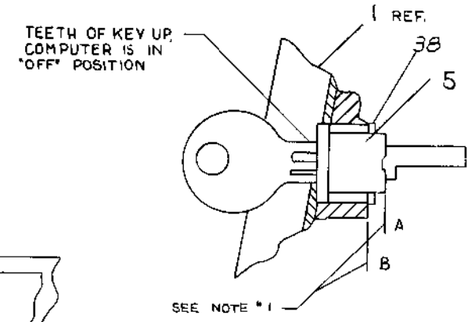
DRB 108
DEC 16-(325)-1062-2B-R972

LEGEND	
PART NO.	VARIATION
KYII-JA	1105 CONSOLE WITH L.E.D.S.
KYII-JB	1110 CONSOLE WITH L.E.D.S.
KYII-JC	VT40 CONSOLE WITH L.E.D.S.
KYII-JF	UC15 CONSOLE WITH L.E.D.S.
KYII-JD	10½" 1105 CONSOLE WITH L.E.D.S.
KYII-JE	10½" 1110 CONSOLE WITH L.E.D.S.
KYII-JJ	INDUSTIAL CONSOLE WITH L.E.D.S.

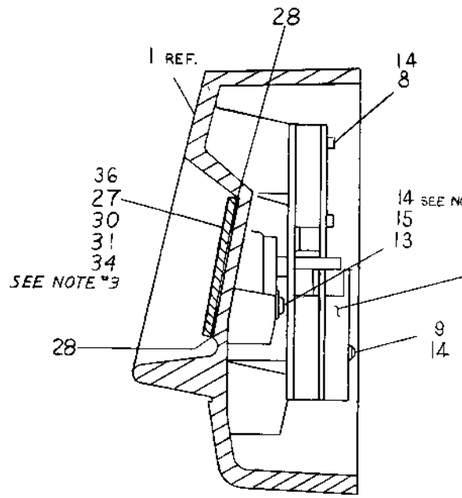
NOTES:
1. CASTING KEY HOLE SURFACES A & B TO BE COATED WITH LUBE (ITEM #18)
2. LOCK WASHER IS NOT USED ON SCREW UNDER SWITCH.
3. INSERT CONTROL PANEL (ITEM #27,30,31 OR 34) USING ADHESIVE TRANSFER TAPE (ITEM #28) ON REAR SURFACE & PRESS FIRMLY IN PLACE.
4. INSTALL 18 INCHES OF TAPE (ITEM #39) ON UNSHIELDED SIDE OF I/O CABLE BEGINNING AT FAR END OF CABLE FROM CONSOLE. ALL VARIATIONS EXCEPT JD AND JE.



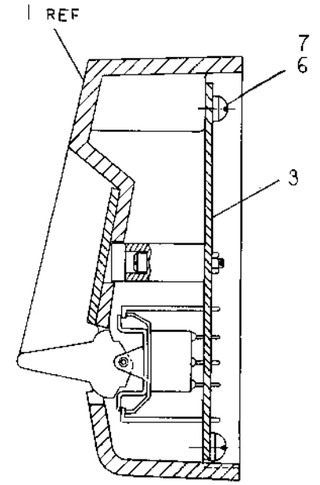
VIEW D-D
SCALE: NONE



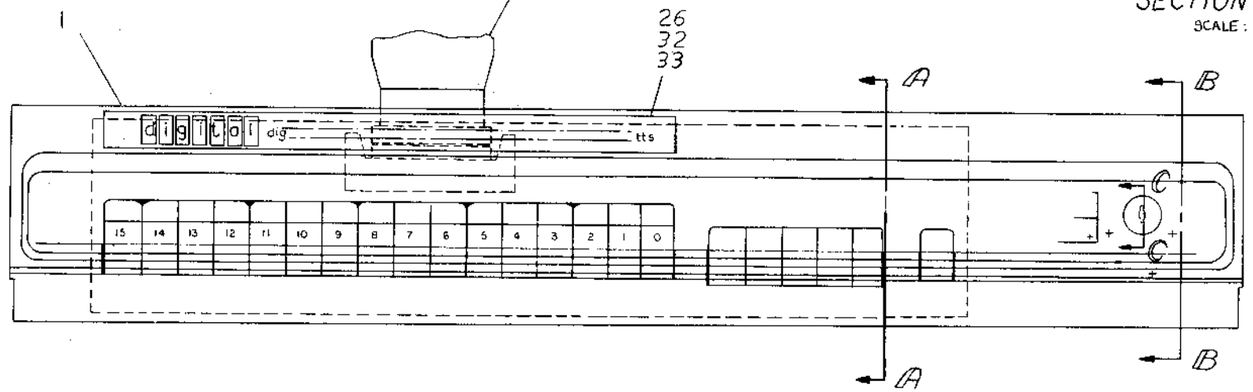
SECTION C-C
SCALE: 2/1



SECTION B-B
SCALE: 2/1



SECTION A-A
SCALE: 2/1



REVISIONS			
CHK	CHANGE NO.	REV	
[illegible]	KYII-00001	D	REVISED PER DRAWN.
G. Graham 11-28-72	1105-00040	E	
[illegible]			
G. GRAHAM	M. TITELBAUM		
DWG NO WAS KYII-0-0			
G. Graham 2-9-73	KYIIJ-00001	F	
G. GRAHAM	KYIIJ-00002	H	
J. Chandler 2-14-73	RANDALL		
Jim Randall 2-16-73	KYIIJ-00003	J	
F. ELIA 11-20-73	KYIIJ-00004	K	
G. GRAHAM 3-25-74	B. MINOR		
G. Graham 3-25-74	KYIIJ-00005	L	
J. Chandler 4-3-74	G. GRAHAM		
G. GRAHAM	KYIIJ-00006	M	
J. Chandler 4-12-74	GRAHAM		
J. Chandler 4-21-74	KYIIJ-00007	N	
G. Graham 4-30-74	RANDALL		
J. Chandler 5-2-74			
Jim Randall 5-7-74			

DEC FORM NO DRD 100

FIRST USED ON OPTION/MODEL: PDP 1105

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY √
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

PARTS LIST

QTY.	DESCRIPTION	PART NO.	ITEM NO.

DRN. CAHILL	DATE 11-16-71	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. TESCHNER	DATE 4-14-72	
ENG. GRAHAM	DATE 4-5-72	TITLE: CONSOLE ASSY (PDP 1105)
PROJ. ENG. WEEKS	DATE 5-5-72	
PROD. PETERSON	DATE 5-10-72	
NEXT HIGHER ASSY D-UA-1105-0-0		SIZE D CODE UA NUMBER KYII-J-0 REV N
SCALE 1/1		DIST. G
SHEET 1 OF 1		

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY	R. ROBICHAUD	CHECKED	C. TESCHNER	SECTION	1
DATE	12-8-71	DATE	5-1-72		
ENG	G. Graham	PROD	R. K. PETERSON	ISSUED SECT.	1
DATE	4-5-72	DATE	5-10-72		

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION											
			KY11-JA	KY11-JB	KY11-JC	KY11-JF	KY11-JD	KY11-JE	KY11-JJ					
1	D-MD-7410799-0-0	CONSOLE BEZEL REWORK	1	1	1	1	1	1	—					
~~2~~	~~E-IA-7409374-3-0~~	~~BEZEL CONSOLE (11/10)~~	~~X~~	~~1~~	~~X~~	~~X~~			—					
3	E-IA-5409766-0-0	CONSOLE ETCH BOARD ASSY	1	1	1	1	1	1	—					
~~4~~	~~E-IA-5409766-2-0~~	~~CONSOLE ETCH BOARD ASSY (OPOCA)~~	~~X~~	~~X~~	~~1~~				—					
5	A-PS-1210978-0-0	LOCK & CAM ASS'Y	1	1	1	1	1	1	—					
6	9006020-1	SCR, PHL PAN HD. #6-32 X 1/4 LG	6	6	6	6	6	6	6					
7	9006633	WASH INT TOOTH LOCK #6	6	6	6	6	6	6	6					
8	9006003-1	SCR PHL PAN HD # 2-56 X 3/8 LG	2	2	2	2	2	2	2					
9	9008025-1	SCR PHL PAN HD #2-56 X 5/8 LG	2	2	2	2	2	2	2					
10	~~1210790-0-0~~	~~SWITCH DPST N.O.~~	~~1~~	~~1~~	~~1~~				—					
11	~~C-MD-7409534-0-0~~	~~ACTUATOR RE-WORK~~	~~1~~	~~1~~	~~1~~				—					
12	~~1210905-1~~	~~INSULATOR~~	~~2~~	~~2~~	~~2~~				—					
13	B-IA-7409444-0-0	DETENT	1	1	1	1	1	1	1					
14	9006686	WASH #2 SPLIT LOCK	5	5	5	6	5	5	5					
15	9006000-4	SCR BINDER HD #2-56 X3/16 LG	2	2	2	2	2	2	2					
16	~~1210904-1~~	~~SWITCH TMD 5201 (COLD CONTACT 291-5201-001~~	~~1~~	~~1~~	~~1~~				—					
17	C-UA-BC08R-03	I/O CABLE (3'-0" LG)	1	1	1	1	X	X	1					
18	4901077	LUBE (FOR CAM LOCK)	A/R	A/R	A/R	A/R			A/R					
19	B-IA-7409730-0-0	JUMPER, POWER	2	2	2	2	2	2	2					
20	~~B-MD-7409868-0-0~~	~~SWITCH ADAPTER PLATE~~	~~1~~	~~1~~	~~1~~				—					
21	~~B-MD-7409867-0-0~~	~~EXTENDER LEAF REWORK (ACTUATOR)~~	~~1~~	~~1~~	~~1~~				—					
22	~~9008449-2~~	~~SCR PHL FLAT HD #2-56 X 1/4 LG.~~	~~2~~	~~2~~	~~2~~				—					

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
CONSOLE ASSY (PDP11/05)	D-UA-KY11-J-0	A	PL	KY11-J-0	N	KY11J-00007
	SHEET 1 OF 2	DIST	G			

DEC FORM DEC 16 (3251-1031 NS70
DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY	R. ROBICHAUD	CHECKED	C. TESCHNER	SECTION	1
DATE	12-8-71	DATE	5-1-72		
ENG	G. GRAHAM	PROD	R. K. PETERSON	ISSUED SECT.	1
DATE	4-5-72	DATE	5-10-72		

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION											
			KY11-JA	KY11-JB	KY11-JC	KY11-JF	KY11-JD	KY11-JE	KY11-JJ					
~~23~~	~~B-IA-7409374-4-0~~	~~BEZEL CONSOLE (VT40)~~	~~X~~	~~X~~	~~1~~	~~X~~			—					
24	A-PS-1210982-0-0	KEY LOCK SWITCH	1	1	1	1		1	1					
~~25~~	~~B-IA-7409374-5-0~~	~~BEZEL CONSOLE (UC15)~~	~~X~~	~~X~~	~~X~~	~~1~~			—					
26	C-PS-3611275-0-0	LOGO (PDP-1105) NOTE VARIATIONS	1	1	X	X	1	1	1					
27	D-IA-7409431-1-0	PANEL CONTROL (1105)	1	X	X	X	1	X	X					
28	9009210-1	ADHESIVE TRANSFER TAPE ½ WIPE	A/R	A/R	A/R	A/R	A/R	A/R	A/R					
~~29~~	~~1211052~~	~~CONSOLE PROTECTIVE COVER~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~					
30	D-IA-7409431-3-0	PANEL CONTROL (1110)	X	1	X	X	X	1	X					
31	D-IA-7409768-0-0	PANEL CONTROL (GT40)	X	X	1	X	X	X	X					
32	C-PS-3611275-4-0	LOGO (DEC GRAPHIC)	X	X	1	X	X	X	X					
33	C-PS-3611275-5-0	LOGO (UC15)	X	X	X	1	X	X	X					
34	D-IA-7409431-4-0	PANEL CONTROL (UC15)	X	X	X	1	X	X	X					
35	C-UA-BC08R-64	I0 CABLE (4'-0"LG)	X	X	X	X	1	1	X					
36	D-IA-7411393-0-0	INDICATOR PANEL (INDUSTRIAL)	X	X	X	X	X	X	1					
37	C-MD-7411728-0-0	KEY LOCK SWITCH, REWORK	X	X	X	X	1	X	X					
38	9009589	RETAINING RING .025 THK	1	1	1	1	1	1	1					
39	9009339	TAPE CLOTH WATERPROOF 2" WIDE GRAY	A/R	A/R	A/R	A/R	X	X	A/R					

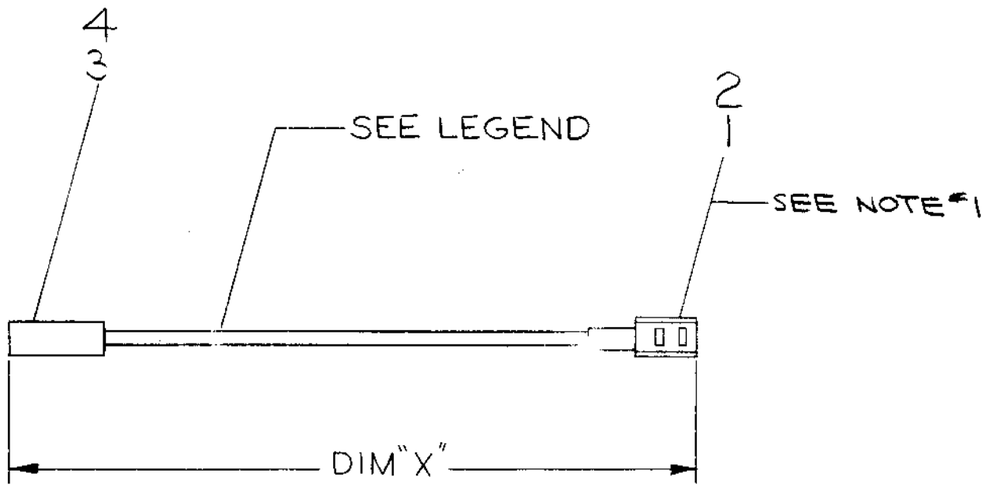
TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
CONSOLE ASSY (PDP11/05)	D-UA-KY11-J-0	A	PL	KY11-J-0	N	
	SHEET 2 OF 2	DIST	G			

DEC FORM DEC 16 (3251-1031 NS70
DRA 110

REV.	NUMBER	CODE	SIZE
	7409730-0-0	IA	B

LEGEND			
NUMBER	DIM"X"	COLOR	ITEM
7409730-01	5 1/2"	BLACK	5

NOTES:
1. ITEM # 2 (SHRINK TUBING) TO COVER CONTACT AREA OF ITEM # 1 (SOLDERLESS CONN.)



QTY.	DESCRIPTION	PART NO.	ITEM NO.
A/R	WIRE, #18 AWG, BLK	9107278-00	5
1	MINI FASTAB #60291-1	1210820-2	4
1	HOUSING, 1-480417-C	1210820-1	3
1	TUBING, SHRINK (WHITE)	9107252	2
1	SOLDERLESS CONN.-50902	9007917	1

PARTS LIST

FIRST USED ON OPTION MODEL: PDP-1105

REVISIONS	REV.	CHANGE NO.	CHK

DRN. CBMcCy	DATE 4-11-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. C.Teschner	DATE 4-19-72	
ENG. G. Graham	DATE 4-19-72	
PROJ. ENG. D D Wenke	DATE 4-26-72	TITLE: JUMPER, POWER
PROD. R K Peterson	DATE 4/27/72	
NEXT HIGHER ASSEMBLY: —		
SCALE NONE		SIZE B · CODE IA · NUMBER 7409730-0-0 · REV.
SHEET 1 OF 1		DIST. G

DEC FORM NO. DRB 109

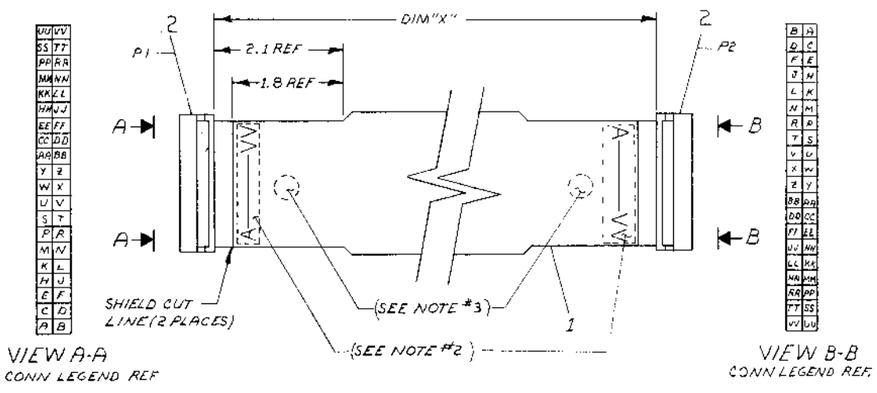
WIRE LIST TABLE

FROM	TO	FROM	TO
P1-A	P2-VV	P1-Y	P2-X
P1-B	P2-UU	P1-Z	P2-W
P1-C	P2-TT	P1-AA	P2-V
P1-D	P2-SS	P1-BB	P2-U
P1-E	P2-RR	P1-CC	P2-T
P1-F	P2-PP	P1-DD	P2-S
P1-H	P2-NN	P1-EE	P2-R
P1-J	P2-MM	P1-FF	P2-P
P1-K	P2-LL	P1-HH	P2-N
P1-L	P2-KK	P1-JJ	P2-M
P1-M	P2-JJ	P1-KK	P2-L
P1-N	P2-HH	P1-LL	P2-K
P1-P	P2-FF	P1-MM	P2-J
P1-R	P2-EE	P1-NN	P2-H
P1-S	P2-DD	P1-PP	P2-F
P1-T	P2-CC	P1-RR	P2-E
P1-U	P2-BB	P1-SS	P2-D
P1-V	P2-AA	P1-TT	P2-C
P1-W	P2-Z	P1-UU	P2-B
P1-X	P2-Y	P1-VV	P2-A

LEGEND

NUMBER	DIM "X"	PRECUT LENGTH
BC08R-01	1.00 FT.	1.00FT ±.5 IN=1.00 IN.
BC08R-02	2.00 FT.	2.00FT ±.5 IN=2.00 IN
BC08R-03	3.00 FT.	3.00FT ±.5 IN=3.00 IN.
BC08R-04	4.00 FT.	4.00FT ±.5 IN=4.00 IN
BC08R-05	5.00 FT.	5.00FT ±.5 IN=5.00 IN
BC08R-06	6.00 FT.	6.00FT ±.5 IN=6.00 IN
BC08R-07	7.00 FT.	7.00FT ±.5 IN=7.00 IN
BC08R-08	8.00 FT	8.00FT ±.5 IN=8.00 IN
BC08R-09	9.00 FT.	9.00FT ±.5 IN=9.00 IN
BC08R-10	10.00 FT.	10.00FT ±.5 IN=10.00 IN
BC08R-11	11.00 FT.	11.00FT ±.5 IN=11.00 IN
BC08R-12	12.00 FT.	12.00FT ±.5 IN=12.00 IN
BC08R-13	13.00 FT	13.00FT ±.5 IN=13.00 IN
BC08R-14	14.00 FT	14.00FT ±.5 IN=14.00 IN
BC08R-15	15.00 FT	15.00FT ±.5 IN=15.00 IN
BC08R-16	16.00 FT	16.00FT ±.5 IN=16.00 IN
BC08R-17	17.00 FT	17.00FT ±.5 IN=17.00 IN
BC08R-18	18.00 FT	18.00FT ±.5 IN=18.00 IN
BC08R-19	19.00 FT	19.00FT ±.5 IN=19.00 IN
BC08R-20	20.00 FT	20.00FT ±.5 IN=20.00 IN
BC08R-25	25.00 FT	25.00FT ±.5 IN=25.00 IN
BC08R-30	30.00 FT	30.00FT ±.5 IN=30.00 FT
BC08R-35	35.00 FT	35.00FT ±.5 IN=35.00 FT
BC08R-50	50.00 FT	50.00FT ±.5 IN=50.00 FT
BC08R-60	60.00 FT	60.00FT ±.5 IN=60.00 FT
BC08R-75	75.00 FT	75.00FT ±.5 IN=75.00 FT
BC08R-90	100.00 FT	100.00FT ±.5 IN=100.00 FT
BC08R-A3	130.00 FT	130.00FT ±.5 IN=130.00 FT
BC08R-96	160.00 FT	160.00FT ±.5 IN=160.00 FT

1. ASSEMBLE THIS CABLE PER PROCESS SPEC #7606485-0-0.
2. CONNECTOR LEGEND IDENTIFICATION TO BE PLACED ON SHIELD SIDE OF CABLE IN THIS AREA AS SHOWN.
3. INSPECTION & TEST STAMPS TO BE PLACED AT EACH END OF THE CABLE ASSY.
4. STRIP LENGTH SHOULD BE .62 ± 4/32.



REVISIONS			
DIN	CHANGE NO		REV.
7711	BC08R-00007		L
	REVISED & REDRAWN		
	S. HOLMES		
	P. GARDNER		

2	CONNECTOR, 9P SOCKET	12112206	2
AR	CABLE, 9P COND. FLAT W/SHIELD	17000004	1
	DESCRIPTION	DWG./PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE INCHES					
		OVER 0 TO 0.6	OVER 0.6 TO 1.2	OVER 1.2 TO 4.0	OVER 4.0 TO 12.0	OVER 12.0 TO 40.0	OVER 40.0 TO 80.0
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±.004	±.008	±.012	±.016	±.024	±.04
	PREFERRED ☐	±.012	±.016	±.026	±.04	±.063	±0.1

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

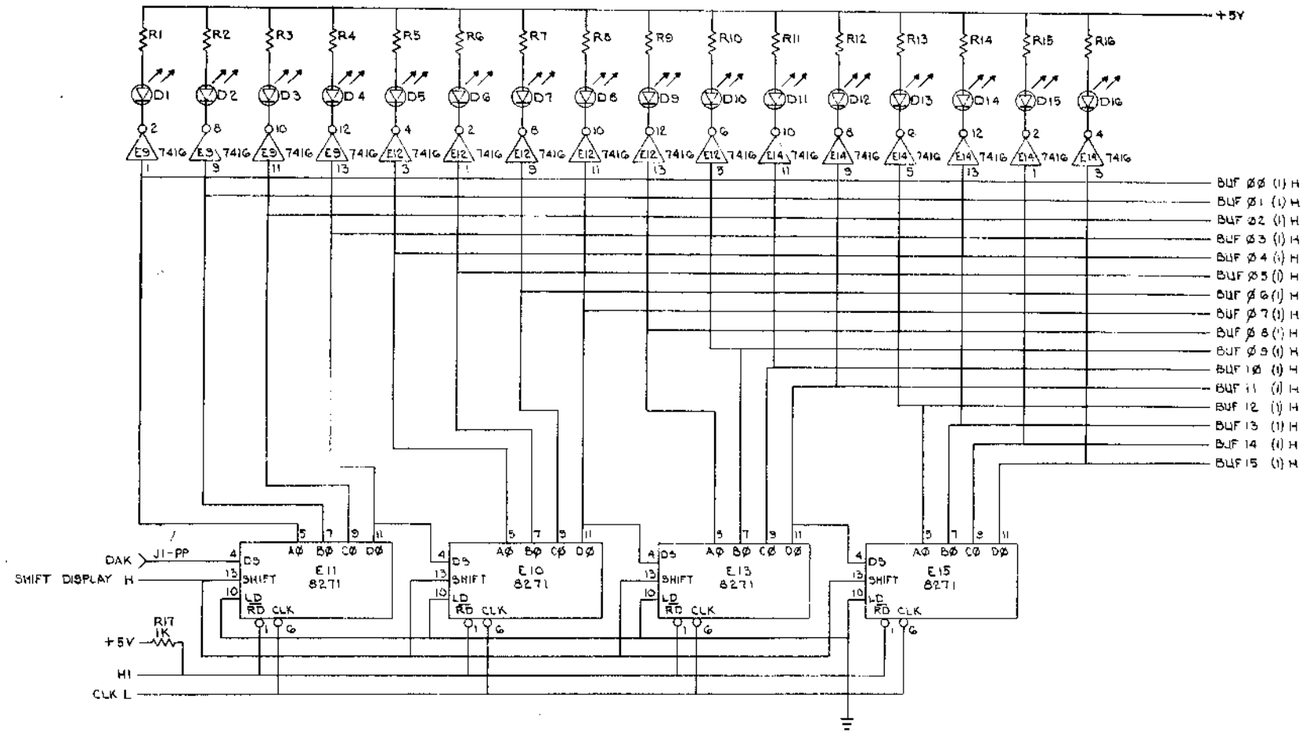
REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

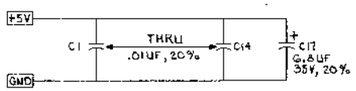
MATERIAL

FINISH

DRN'D FONTAINE	4-28-76	FIRST USED ON
CHK'D J. FLEMING	[illegible]	digital
ENG'R GARDNER	5-3-76	TITLE BC08R I/O CABLE
PROJ. ENG'R GARDNER	5-3-76	
PROD. DOCUMENTATION	5-4-76	
NEXT HIGHER ASSY.		SIZE D CODE JA NUMBER BC08R-0-0 REV. M
SCALE		
SHEET 1 OF 1		DIST.



UNLESS OTHERWISE INDICATED:
RESISTORS = 1/4W, 5%
CAPACITORS = 100V, 5%
DIODES ARE LIGHT EMITTING
PIN 14 = +5V, PIN 7 = GND ON DEC 7404, 7416, 7417
PIN 16 = +5V, PIN 8 = GND ON DEC 8271, 74123, 74193



REVISIONS					
REV	CHANGE NO.	CHK			
B	5409766-00001	RK	R. KRISHNA	8-2-72	
D	5409766-00003	RK	R. KRISHNA	6-28-72	
E	5409766-00004	RK	R. KRISHNA	7-5-72	
C	5409766-00002	RK	R. KRISHNA	6-28-72	
F	5409766-00005	RK	R. KRISHNA	8-23-72	
H	5409766-00006	RK	R. KRISHNA	9-21-72	
J	5409766-00007	RK	R. KRISHNA	4-4-73	

B. ARMSTRONG 5/24/74

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN. Roger J. Doucette DATE 16 Jan 72
CHK'D Rodney DATE 16 Jan 72
ENG. RKrishna DATE 2-10-72
PROJ. ENG. RKrishna DATE 2-10-72
PROD. RPatten DATE 2-10-72
NEXT HIGHER ASSY E-IA5409766-0-0
SCALE
SHEET OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE 11/05 CONSOLE

SIZE D CODE CS NUMBER 5409766-0-1 REV. J DIST.

DEC FORM NO. DRD-135

SIZE D CODE CS NUMBER 5409766-0-1 REV J

J1
E KEY LOAD ADRS (I) L
H KEY EXAM (I) L
K KEY CONT (I) L
M KEY HLT ENB (I) L
P KEY START (I) L
S KEY DEP (I) L

R27 47 · R28 47 · R29 47 · R30 47 · R31 47 · R32 47 · +5V

R33 1K · R34 1K · R35 1K · R36 1K · R37 1K · R38 1K · R39 1K · R40 1K · R41 1K · R22 1K · R23 1K · R29 1K

7416 E2 12 13 · 7416 E2 10 11 · LOAD ADDRESS 96 UP DOWN
7416 E2 2 1 · 7416 E2 4 3 · EXAMINE 95 UP DOWN
7416 E1 12 13 · 7416 E1 10 11 · CONTINUE 94 UP DOWN
7416 E1 2 1 · 7416 E1 4 3 · HALT 93 UP DOWN
7416 E1 6 5 · 7416 E1 8 9 · START 92 UP DOWN
7416 E2 6 5 · 7416 E2 8 9 · DEPOSIT 91 UP DOWN

7417 E3 12 13 · 7417 E3 10 11 · 7417 E3 8 9 · 7417 E3 4 3 · 7417 E3 2 1 · 7417 E3 6 5

+5V R42 1K

PANEL LOCK
7416 E7 6 5 · 7404 E5 5 6
PUP L

RUN J1-C
7404 E5 3 4 · 7416 E5 5 6 · D17A · R24 · +5V

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

REV	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN. Roger J Ducette DATE 19 JAN 72
CHK'D. Thomas DATE 20 JAN 72
ENG. DR. Krishnan DATE 1-20-72
PROJ. ENG. DR. Krishnan DATE 1-20-72
PROD. R.F. Peterson DATE 2-10-72
NEXT HIGHER ASSY E-IA-5409566-0-0
SCALE
SHEET 2 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE 11/05 CONSOLE

SIZE D · CODE CS · NUMBER 5409766-0-1 · REV J · DIST

DEC FORM NO. DRD-135

5409766-0-1 J CS

+5V
R21
1K

S22 S21 S20 S19 S18 S17 S16 S15 S14 S13 S12 S11 S10 S9 S8 S7

J1
BB SW 15 (1) H
DD SW 14 (1) H
FF SW 13 (1) H
JJ SW 12 (1) H
LL SW 11 (1) H
NN SW 10 (1) H
RR SW Ø9 (1) H
TT SW Ø8 (1) H
J SW Ø7 (1) H
L SW Ø6 (1) H
N SW Ø5 (1) H
R SW Ø4 (1) H
T SW Ø3 (1) H
V SW Ø2 (1) H
X SW Ø1 (1) H
Z SW ØØ (1) H

J1
HH SCAN ADRS Ø1 (1) L
KK SCAN ADRS Ø2 (1) L
MM SCAN ADRS Ø4 (1) L
SS SCAN ADRS Ø8 (1) L

E5 7404 (1,2) (13,12) (11,10) (9,8)
E7 7416 (11,10) (13,12) (9,8) (1,2)

SHIFT DISPLAY H

R26
1K
+5V

(T)
PUP-L J1-CC

E4 74123 (1,2,10,13,14,15)
R18 1K
C13 100PF
R19 27K
R20 27K
C16 100PF
E4 74123 (9,10,7,6)

E6 74193
UP CNT (5)
DN CNT (4)
LD (11)
CLEAR (14)
QA QB QC QD (3,2,6,7)
CO (12)

E8 74193
UP CNT (5)
DN CNT (4)
LD (11)
CLEAR (14)
QA QB QC QD (3,2,6,7)

+5V
HI
CLK L

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

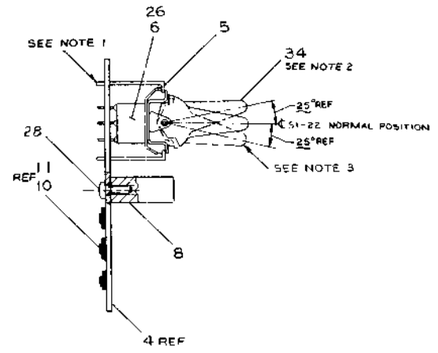
ETCH BOARD REV E

REV	CHANGE NO.	DEC NO.	EIA NO.
CHK	REVISIONS		

SEMICONDUCTOR CONVERSION CHART

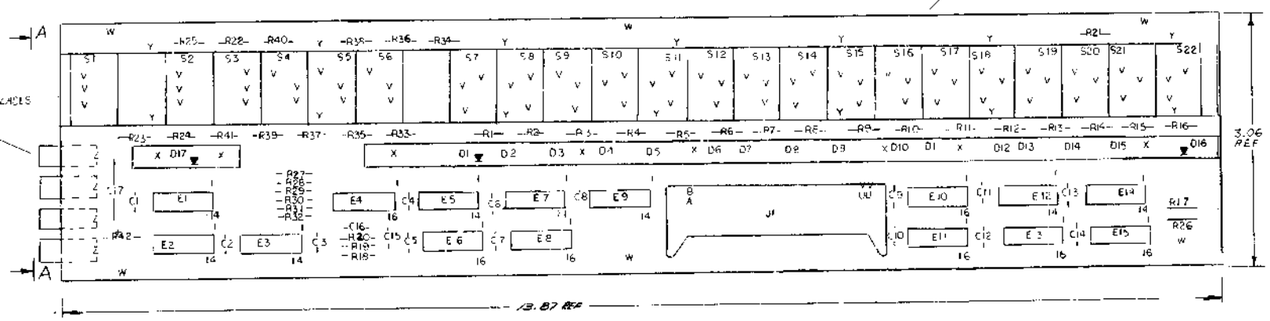
DRN Roger J. Bourdette	DATE 20-JAN-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D Rodney	DATE 26-JAN-72	TITLE	11/05 CONSOLE
ENG'G R. Krishna	DATE 2-10-72		
PROJ. ENG. R. Krishna	DATE 2-10-72		
PROD. R.F. Peterson	DATE 2-10-72		
NEXT HIGHER ASSY E-IA-5409766-0-0		SIZE D CODE CS NUMBER 5409766-0-1	REV J
SCALE		DIST.	
SHEET 3 OF 3			

DEC FORM NO. DRD-155



VIEW A-A

NOTES:
1. ATTACH SWITCH BRACKET (ITEM #8) TO ETCH BOARD (ITEM #1) BY TURNING TABS VIA TURN ON SWITCH BRACKET USING TWISTING TOOL # 8-MD-7605203 (14 PLACES)
2. ASSEMBLE S2, 3, 4, 5 & 6 AS SHOWN.
3. ASSEMBLE S1 & S7 THRU S22 AS SHOWN.



QTY	REF DESIGNATION	DESCRIPTION	PART NO	ITEM NO.
1		PACKAGING INSTRUCTIONS	APJ-A30088-0-0	37
				36
				35
REF		MWB	C-RS-12107M-0-0	34
				33
				32
				31
				30
				29
8		POST-RIVET TYPE F 4-40-.516	7069236	28
				27
4	S3,S2,S4,S5,S6	SWITCH, MOMENTARY	1270881	26
1	E8	IC, DEC 7011	1909729	25
1	E9	IC, DEC 74123	1910436	24
2	E6, E8	IC, DEC 7493	1910018	23
6	E9, E12, E10, E7, E1, E2	IC, DEC 7416	1909528	22
1	E2,	IC, DEC 7400	1301486	21
4	E10, E11, E13, E15	IC, DEC 8271	1909625	20
2	R19, R20	RES. 270 ¼W 5%	1302896	19
17	R1-R16, R24	RES. 180 OHM 5%	1300565	18
17	R17-R18, R21-R23, R25, R28, R36-R41, R42	RES. 1K ¼W 5%	1300565	17
6	R27-R32	RES. 10 ¼W 5%	1300202	16
14	C1-C14	CAP. .01 MF 100V 20%	1004410	15
1	C17	CAP. 6.8 MF 35V 20%	1000063	14
2	C15, C16	CAP. 100 PF 100V 5%	1000016	13
17	D1-D17	DIODE, LIGHT EMITTING (RED)	1110869	12
9		SOCKET "DIP-8 STANDARD	3007387	11
9		PASTON TAB	3009116	10
8		LED HOLDER (RED)	1210795-2	9
1		SINGLE L.E.D. HOLDER (RED)	1211868-2	8
1	X	CONNECTOR	1903341	7
17	S1, S7-S22, S8	SWITCH, TOGGLE	1210840	6
1		SUBPART, SWITCHES	A-03-3909270-2-0	5
1		ETCH CIRCUIT BOARD	B-04-5909765-0-0	4
REF		MODULE BOM HISTORY	B-04-5909766-0-0	3
REF		CIRCUIT SCHEMATIC	B-05-5909766-0-1	2
REF		X-Y COORDINATE AND LOCATION	B-09-5909766-0-0	1

ETCH BOARD REV E

PARTS LIST

IC TYPE	GND	+5V
DEC 7012	8	16
DEC 7493	8	16
DEC 8271	7	16

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

IC PIN LOCATIONS

ITEM NO.	AWG	FROM PT	TO PT

JUMPER LIST

DEC NO.	EIA NO	DEC NO	EIA NO

SEMICONDUCTOR CONVERSION CHART

REV	CHANGE NO.	DRAWING ED	CHK	DESCRIPTION
A	5409766-00001	15	R. KRISHNA	4-18-74
B	5409766-00002	15	R. KRISHNA	4-18-74
C	5409766-00003	15	R. KRISHNA	4-18-74
D	5409766-00004	15	R. KRISHNA	4-18-74
E	5409766-00005	15	R. KRISHNA	4-18-74

DRAWN	R. KRISHNA	4-18-74
CHECKED	R. ARMSTRONG	4-18-74
ENG APPROVAL	R. ARMSTRONG	4-18-74
MFG APPROVAL		
NEXT HIGHER ASSY		
SCALE	2/1	
SHEET	1 OF 1	

digital EQUIPMENT CORPORATION

TITLE: ETCH BOARD ASSY. (11/05 CONSOLE)

SIZE E | DWG NO. J.A 5409766-0-0 | REV J

DIST. 1

digital EQUIPMENT CORPORATION

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET ☐☐☐☐

	SEQUENCE
DRAWING DIRECTORY	B-DD-H75Ø-Ø
UNIT ASSEMBLY	E-UA-H75Ø-Ø-Ø
CIRCUIT SCHEMATIC	D-CS-H75Ø-Ø-1
DIODE BOARD, P.S.	
CIRCUIT SCHEMATIC	B-CS-5411253
REGULATOR BOARD	E-IA-5409728-Ø-Ø
CIRCUIT SCHEMATIC	D-CS-5409728-Ø-1
5V REGULATOR BOARD	E-UA-H744-Ø-Ø
5V REGULATOR	D-CS-H744-Ø-1
H75Ø POWER SUPPLY HARNESS	E-IA-7009207-Ø-Ø

	SEQUENCE
MFG PRINT SET	
PACKAGING INSTRUCTION	A-PI-3700086-0-0

UNIT VARIATIONS

VAR	TITLE	PRINT SET H75Ø-Ø
H75Ø-Ø	H75Ø POWER SUPPLY	X

REVISIONS	DATE	CHG. NO.	REV
	3-73	H75Ø-00001	A
	5-73	H75Ø-2	B
	6-73	H75Ø-3	C
	7-73	H75Ø-4	D
	8-73	H75Ø-5	E
	11-73	H75Ø-6	F
	11-73	H75Ø-7	H
	2-74	H75Ø-8	J
	5-74	H75Ø-9	K
	9-74	H75Ø-11	L
	1-75	H75Ø-13	M

USED ON OPTION/MODEL	
11/35	

SHEET 1 OF 3

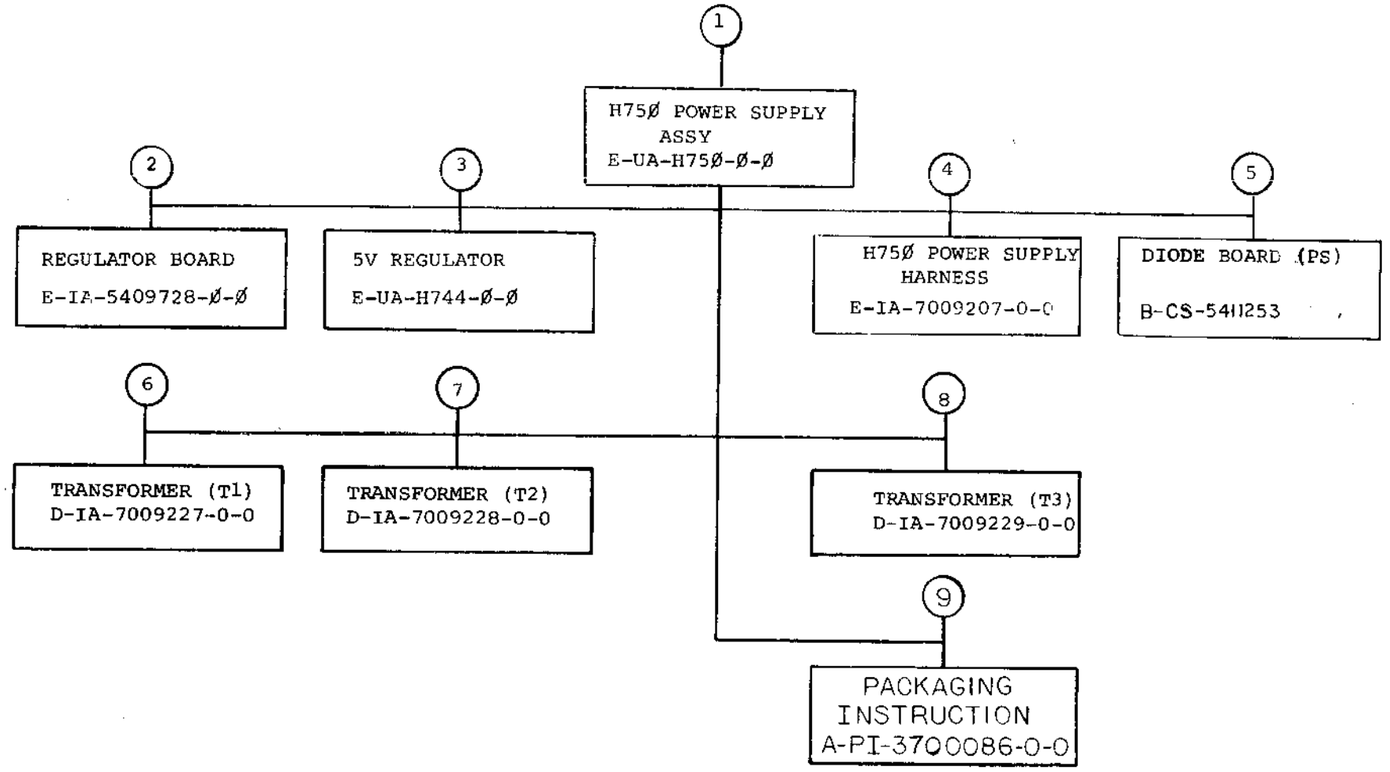
DRN.		DATE 1-15-72
CHK'D.		DATE 1-16-72
PROJ ENG.	R. A. Wolf	DATE 2/12/73
PROD.		DATE 2-21-73
FIELD SERV.		DATE 2/13/73

TITLE: POWER SUPPLY H75Ø

SIZE	CODE	NUMBER	REV
B	DD	H75Ø-Ø	M

DIST

DRB 106



TITLE	SHEET	SIZE	CODE	NUMBER	REV
POWER SUPPLY H75Ø	2 OF 3	B	DD	H75Ø-Ø	M

ELECTRICAL

CUSTOMER PRINT SET H75Ø-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X	X	1	E-UA-H75Ø-Ø-Ø	L	2	H75Ø POWER SUPPLY ASSY	
X	X		D-CS-H75Ø-Ø-1	B	1	CIRCUIT SCHEMATIC (H75Ø PS.)	
	X		A-SP-H75Ø-Ø-3	A	1	TEST PROCEDURE	
			1211222		1	RELAY	
X	X	2	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
X	X		D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			K-CO-5409728-0-4		1	X-Y COORDINATE HOLE LOC.	
			B-MH-5409728-0-6		1	MODULE ECO HISTORY	
			5009727		1	ETCH BOARD	
X	X	3	E-UA-H744-Ø-Ø	#	1	5V REGULATOR	
X	X		D-CS-H744-Ø-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-H744-Ø-4		1	X-Y COORDINATE HOLE LOCATION	
			K-CO-H744-Ø-5		1	ASSY/DRILLING HOLE LOCATION	
			D-AH-H744-Ø-6		1	MODULE ECO HISTORY	
			5009725		1	ETCH BOARD	
X	X	4	E-IA-7009207-0-0	#	1	H75Ø POWER SUPPLY HARNESS	
X	X	5	B-CS-5411253	#	1	DIODE BOARD PS.CIRCUIT SCHEMATIC	
			K-CO-5411253		1	X-Y COORDINATE HOLE LOC.	
			B-MH-5411253		1	MODULE ECO HISTORY	
			E-IA-5011252		1	ETCH CIRCUIT BOARD	
	X	6	D-IA-7009227-0-0	#	1	TRANSFORMER REWORK (T1)	
			1611224		1	TRANSFORMER	
	X	7	D-IA-7009228-0-0	#	1	TRANSFORMER REWORK (T2)	
			1611225		1	TRANSFORMER	
	X	8	D-IA-7009229-0-0	#	1	TRANSFORMER REWORK (T3)	
			1610150		1	TRANSFORMER	

MECHANICAL

CUSTOMER PRINT SET H75Ø-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	E-UA-H75Ø-Ø-Ø	J	2	H75Ø POWER SUPPLY ASSY	
	X		E-IA-7409723-0-0	#	2	CHASSIS POWER SUPPLY	
			1209403		1	FAN SUPER BOXER	
	X		C-MD-7409722-0-0	#	1	COVER, POWER SUPPLY	
			A-DC-7411006-0-0		1	DECAL	
		2	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
			D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			C-IA-5310126-0-0		1	HOLDER CAPACITOR	
			C-MD-5309779-0-0		1	CONTACT,COMMON CAPACITOR	
			C-MD-5309781-0-0		1	CONTACT, CAPACITOR	
		3	E-UA-H744-Ø-Ø	#	1	5V REGULATOR	
			D-CS-H744-Ø-1	#	1	CIRCUIT SCHEMATIC	
		4	E-IA-7009207-0-0	#	1	H75Ø POWER SUPPLY HARNESS	
		5	B CS-5411253	#	1	DIODE BOARD P.S.CIRCUIT SCHEMATIC	
		6	D-IA-7009227-0-0	#	1	TRANSFORMER REWORK (T1)	
			1611224		1	TRANSFORMER	
		7	D-IA-7009228-0-0	#	1	TRANSFORMER REWORK (T2)	
			1611225		1	TRANSFORMER	
		8	D-IA-7009229-0-0	#	1	TRANSFORMER REWORK (T3)	
			1610150		1	TRANSFORMER	
	X	9	A-PI-3700089-0-0	#	2	PACKAGING INSTRUCTION	
			A PS 9905237-0-0		2	HALF SLOTTED CARTON INNER	
			A PS 9905238-0-0		2	HALF SLOTTED CARTON OUTER	
			A PS 9905239-0-0		2	LAMINATED PIECE	

CUSTOMER PRINT SET CODES

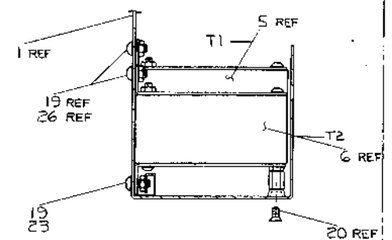
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE	SHEET	SIZE	CODE	NUMBER	REV
POWER SUPPLY H75Ø	3 OF 3	B	DD	H75Ø-Ø	M

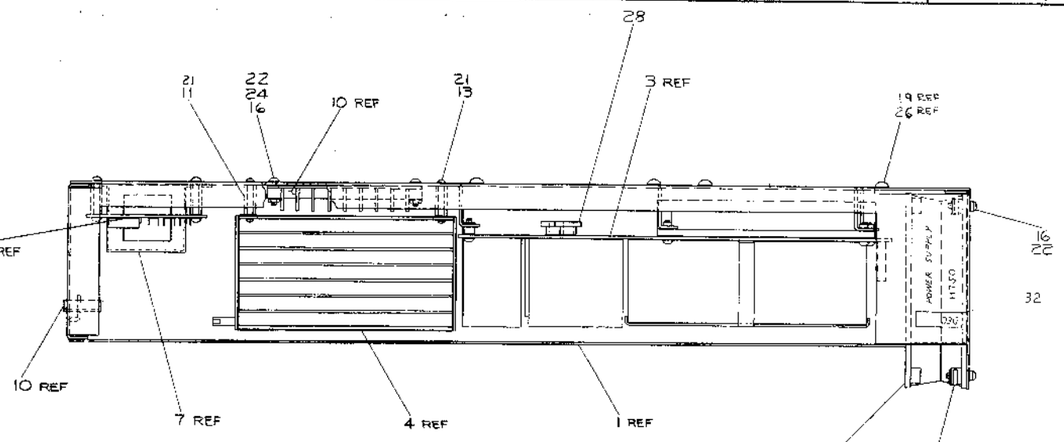
DRB 108

DEC 16-(325)-1062-2B-R972

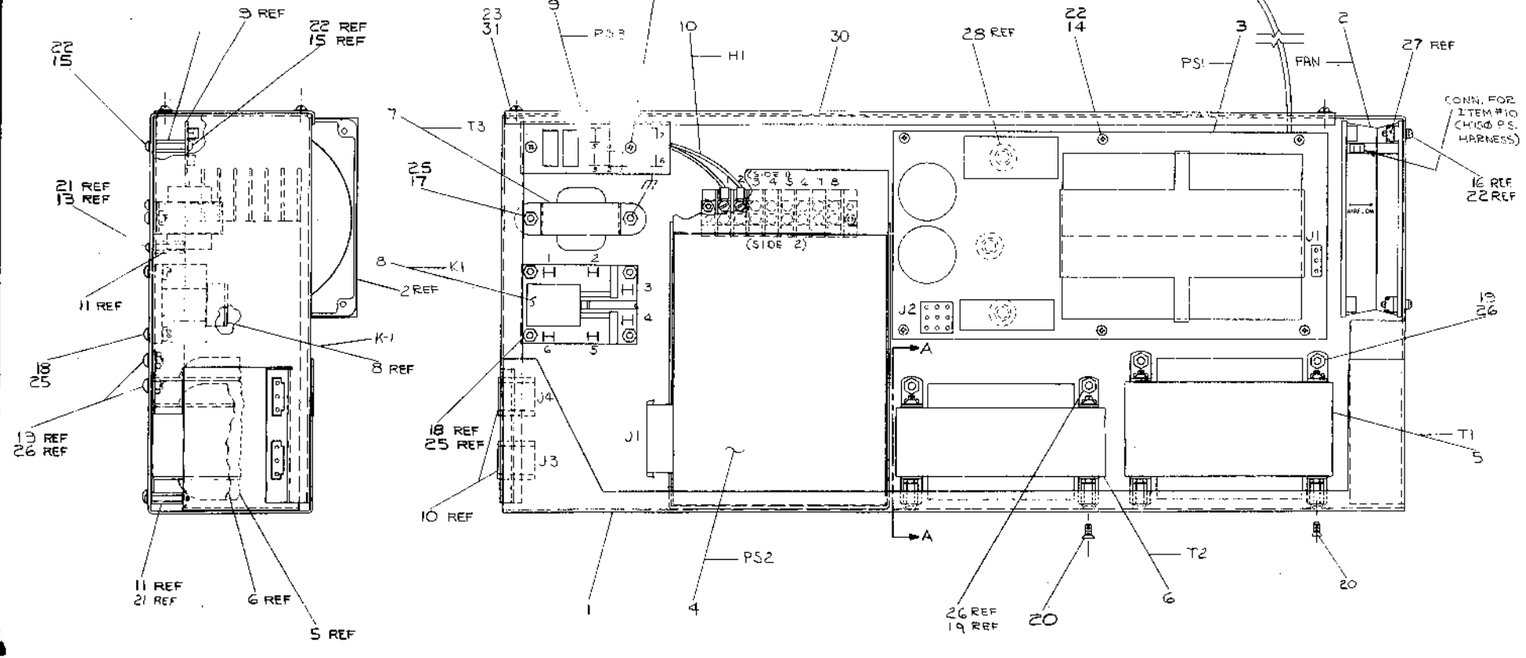
NOTES:
1. FOR EASE IN HANDLING AND MANUFACTURING, ITEMS IN THE H750 POWER SUPPLY SHOULD BE ASSEMBLED AND INSTALLED IN THE CHASSIS (ITEM #1) IN THE FOLLOWING ORDER:
   A) THE RELAY (ITEM #8), TRANSFORMER REWORK (ITEM #7), DIODE BOARD (ITEM #9), HARNESS (ITEM #10), AND FAN (ITEM #2) SHOULD BE INSTALLED IN CHASSIS (ITEM #1) FIRST.
   B) TRANSFORMER (ITEM #5) AND TRANSFORMER (ITEM #6) TO CHASSIS.
   C) REGULATOR BOARD (ITEM #3) TO CHASSIS.
   (D) REMOVE PLASTIC SHIELD AND SCR FROM ITEM #4 (H744) AND REPLACE WITH 4 (ITEM #11, ITEM #21,) THEN INSTALL TO CHASSIS.



SECTION A-A



TOP VIEW
WITH ITEM #30 REMOVED



QTY.	DESCRIPTION	PART NO.	ITM NO.
1	CHASSIS POWER SUPPLY	E-IA-7408722-0-0	1
1	FAN, SUPER BOXER (115)	1208663-01	2
1	REGULATOR BOARD (PS1)	E-IA-5409328-0-0	3
1	SX REGULATOR (PS2)	E-UA-M744-B-B	4
2	SPACER #6-32 X .75 L	9009859	17
4	STANDOFF #6-32 X .75 SW. HEX & FEMALE	9009284	11
1	H750 POWER SUPPLY HARNESS (H7)	E-IA-7009209-0-0	10
1	DIODE BOARD P.S. (PS3)	E-CS-5411253	9
1	RELAY (K1)	7211222	8
1	TRANSFORMER REWORK (T3)	D-IA-7009239-00	7
1	TRANSFORMER REWORK (T2)	D-IA-7009235-0-0	6
1	TRANSFORMER REWORK (T1)	D-IA-7009237-0-0	5
1	SCREW, PHL PAN HD #6-32 X .50L	9009824--	14
4	SCREW, PHL FLAT HD #4-40 X .38 L	9006010-1	13
8	SCREW, PHL TRUSS HD #6-32 X .38L	9009822-3	15
8	SCREW, PHL PAN HD #6-32 X .62 L	9009825-1	16
2	SCREW PHL TRUSS HD #8-32 X .38 L	9009837-3	17
4	SCREW PHL TRUSS HD #8-32 X .62 L	9009840-3	18
8	SCREW, PHILTRUSS HD #10-32 X .44 L	9009872-3	19
4	SCREW, PHILFLAT HD #8-32 X .25 L	9006035-2	20
8	WASHER, INT. TOOTHLOCK #4	9008432	21
18	WASHER, INT. TOOTHLOCK #8	9008833	22
8	WASHER, INT. TOOTHLOCK #10	9008835	23
4	NUT, KEPS #8-32	9009560	24
4	NUT, KEPS #6-32	9009565	25
8	NUT, KEPS #4-32	9009563	26
4	CLIP, FAN MTG #6	9008185	27
4	BUSHING NYLON FLANGE	9008426	28
REF	TEST PROCEDURE	A-SP-H750-0-0	29
1	COVER POWER SUPPLY	E-MD-7409722	30
1	SCREW PHIL TRUS HD 10-32X.38	9009070-3	31
1	DECAL	A-BC7401006	32
1	PACKAGING INSTRUCTION	A-PI-3700098-0-0	33

FIRST USED ON OPTION/MODEL: H750

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES:
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE ROUGHNESS 125 ✓
MATERIAL: SEE PARTS LIST
FINISH:

DRN: [illegible] DATE 7/1/75
DSGNR: [illegible] DATE 7/1/75
PROJ ENGR: [illegible] DATE 7/1/75
PROJ MGR: [illegible] DATE 7/1/75
QUALITY ASSURANCE: [illegible] DATE 8-21-75
NEXT HIGHER ASSY: D-UA-1135-0-0
SCALE: NONE
SHEET 1 OF 2

digital EQUIPMENT CORPORATION
TITLE: H750 POWER SUPPLY ASSY
SIZE: B
CODE IDENT NO.: 80009
NUMBER: E UA H750 - 0 - 0
REV: L

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM CONNECTION	TO CONNECTION	REMARKS
	—	—	H1-P1		
	—	—	H1-J1	P51-J3	
	—	—	H1-J2	—	
	—	—	H1-J3	TO CHASSIS	
	—	—	H1-J4	ITEM #1	
	18	RED	H1-J5	TO FAN	
		WHT	H1-J6	ITEM # 2	
10 (H1)	20	WHT	H1-7	K1-6	
		RED	H1-8	K1-3	
		WHT	H1-9	K1-4	
		ORN	H1-10	K1-5	
		VIO	H1-11	K1-2	
		RED	H1-12	K1-1	
		RED	H1-13	K1-1	
		VIO	H1-14	P53-2	
		ORN	H1-15	P53-3	
	16	BLK	H1-16	P53-5	
	18	BLK	H1-17	P53-2	
	14	BLK	H1-49	P53-5	
	14	BLK	H1-50	T3 - 171	
	—	—	T1-J1	P51-J1	
5 (T1)	14	BLK	T1-1	H1-TB1-5	ALL CONN-
		RED	T1-2	H1-TB1-6	ECTIONS TO
		RED/WHT	T1-3	H1-TB1-7	H1-TB1ARE
	14	BLK/WHT	T1-4	H1-TB1-8	ON SIDE #2.
	—	—	T2-P1		
6 (T2)	—	—	—	—	
	14	BLK	T2-7	H1-TB1-5	ALL CONN
		RED	T2-8	H1-TB1-6	ECTIONS TO
		RED/WHT	T2-9	H1-TB1-7	H1-TB1 ARE
	14	WHT	T2-10	H1-TB1-8	ON SIDE #2
	20	BRN	T3-1	H1-TB1-2	SIDE #1
7 (T3)		RED	T3-2	H1-TB1-3	SIDE #1
		ORN	T3-3	H1-TB1-7	SIDE #1
		YEL	T3-4	K1-6	
		GRN	T3-5	P53-4	
		GRN	T3-6	P53-1	
	20	BLU	T3-7	H1-TB1-1	SIDE #2
8 (A1)	14	BLK	H1-3	P53-6	
	18	BLK	K1-4	P53-7	

USED ON	APPLICATION	QTY	DESCRIPTION / PART NO
H750			

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES: DECIMALS .XXX ± .005, .XX ± .01, .X ± .1; ANGLES ±1°30'. REMOVE BURRS AND BREAK SHARP EDGES .010 MAX. SURFACE FINISH 125 MICRO INCH. MATERIAL: SEE PARTS LIST. FINISH: —

PARTS LIST

DRN [illegible] DATE 10-73
ENGR [illegible] DATE 10-73
CHKD [illegible] DATE 10-73
ENGR APPD [illegible] DATE 10-73
MFG APPD [illegible] DATE 10-73
NEXT HIGHER ASSY: D-UA-1135-00
USED ON: NEXT ASSY
SHEET 2 OF 2

DIGITAL EQUIPMENT CORPORATION

TITLE: H750 POWER SUPPLY ASSY.

SIZE: E | CODE: UA | NUMBER: H750-0-0 | REV: L

SCALE: NONE

H750-0-0-L

NOTES:
1. H1 INDICATES CONNECTORS IN POWER SUPPLY HARNESS. (E-IA-7009207-0-0)
2. DOTTED LINES INDICATE CONNECTIONS VIA 7009208 HARNESS (NOT PART OF H750)

CONNECTS TO BCØ5

H1-P1

K1

T2

T2-P1

PS2 (H744)

J1

TB1

T3

BRN

RED

ORN

YEL

GRN

BLU

GRN

PS3 (5411253)

T1

BLK/WHT

BLU

BLK

BLU

RED/YEL

T1-J1

PS1 (5408728)

H1-J1 J3

THERMAL SWITCH N.C.

H1-J2

TO CONSOLE SWITCH

TO LOGIC FANS

H1-J3

H1-J4

H1-J6

H1-J5

POWER SUPPLY FAN

REV	DESCRIPTION	DATE	APPROVED
D	H750-00006 REVISED AND REDRAWN	11-9-72	R. WOLF
C	H750-00011	11-15-72	R. WOLF
B	H750-00013	1-10-73	BARON

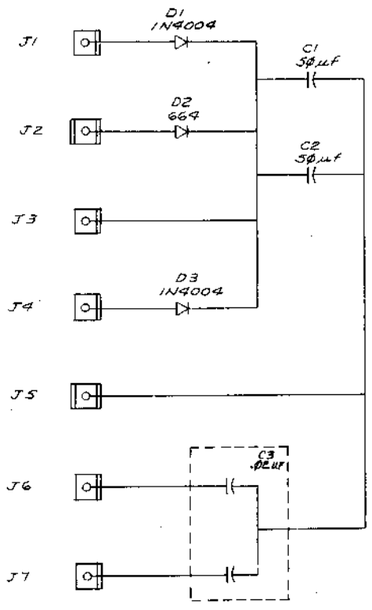
FIRST USED ON OPTION MODEL	PDP 11/35
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	TOLERANCES: DECIMALS .XXX ± .005, .XX ± .02, .X ± .1; ANGLES 0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ?	
MATERIAL	
FINISH	
DRN. K. DAVIS	DATE 11-7-73
CHK'D. J. CAHILL	DATE 2-13-73
ENG. C. BLASI	DATE 2-13-73
PROJ. ENG. R. WOLF	DATE 2-14-73
PROD. G. STRINGER	DATE 2-21-73
NEXT HIGHER ASSY.	
SCALE	
SHEET 1 OF 1	

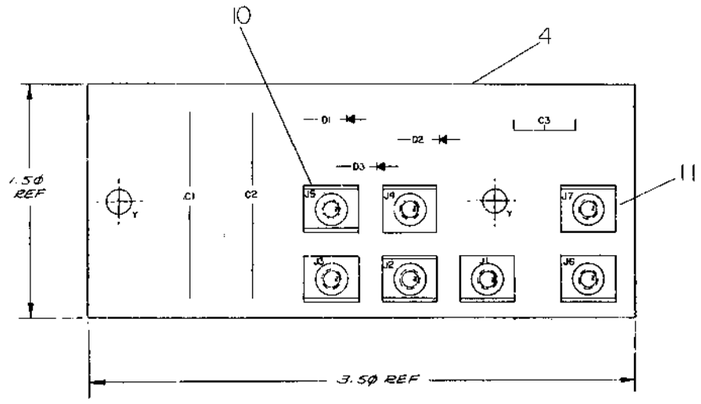
digital EQUIPMENT CORPORATION

TITLE: H75Ø POWER SUPPLY

SIZE D | CODE DCS | NUMBER H750-0-1 | REV. 0

NOTES:





REF				
REF		X-Y COORDINATE HOLE LOCATION	X-CO-5411253-0-4	1
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-5411253-0-5	2
REF		MODULE ECO HISTORY	B-MH-5411253-0-6	3
1		ETCHED CIRCUIT BOARD	5011252-00	4
2	C1, C2	CAP 50 µf 50V TANT	1000080-00	5
1	C3	CAP 2X .02 µf DISC	1010767-00	6
1	D2	DIODE 664	1100114-00	7
2	D1, D3	DIODE 1N4004	1105796-00	8
7		EYELET	9009000-00	9
2	J2, J5	FASTON TAB	9007113-00	10
5	J1, J3, J4, J6, J7	FASTON TAB	9008219-0	11

QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

IC TYPE	GND	+5V

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTWELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

FIRST USED ON OPTION MODEL: H750

ETCH BOARD REV. A

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

G. Baron 2/4/75 BARON
Corrected Title & → 7→
541253-0001 A
CHK CHANGE NO. REV.
REVISIONS

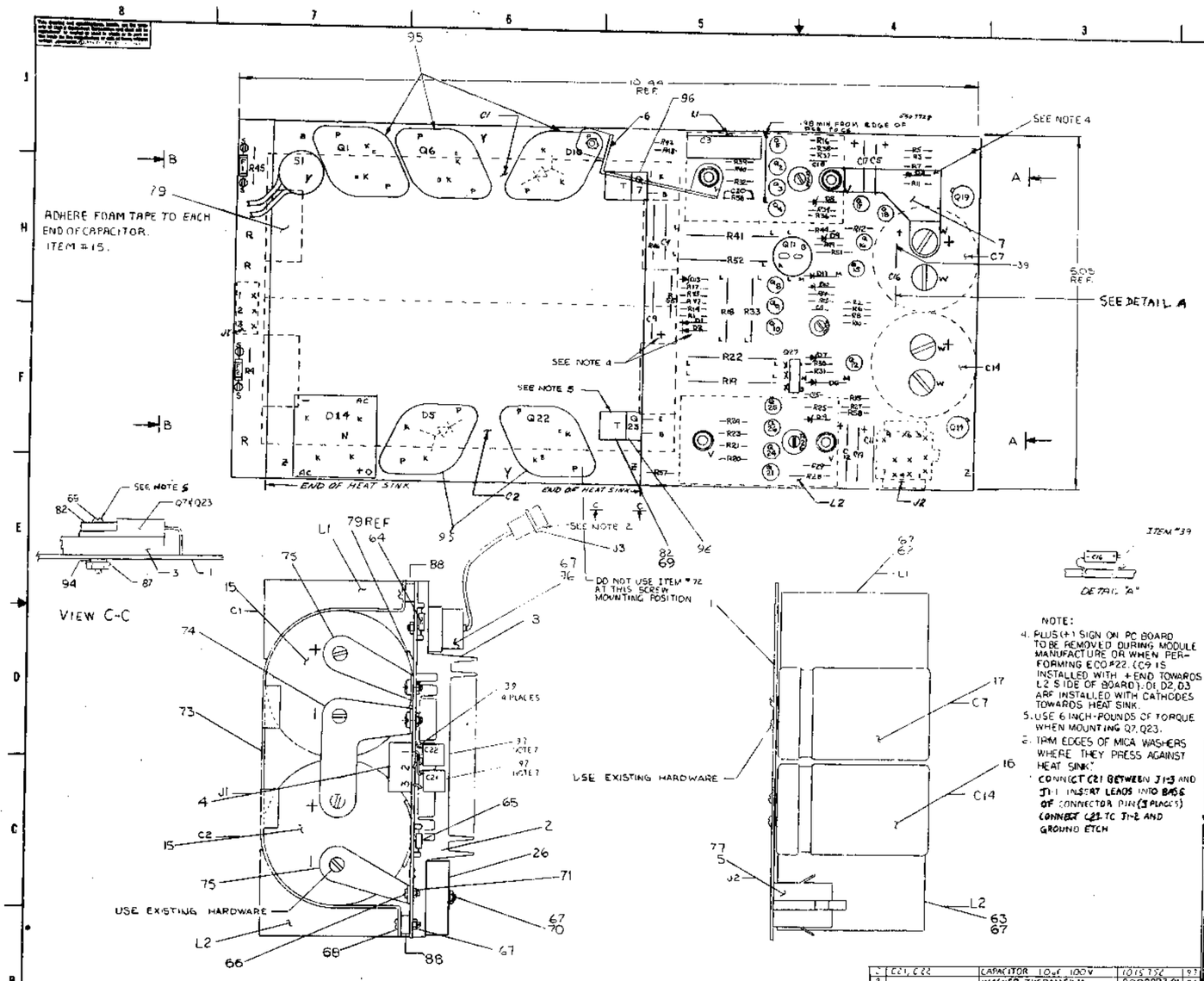
DRN. Gina Mattesse 9/10/74
CH'D M. Perrin 9/11/74
ENG. G. Baron 10/24/74
PROJ. ENG. G. Baron 10/26/74
PROD. Lee Sullivan 10-29-74
NEXT HIGHER ASSY
SCALE
SHEET 1 OF 1

digital

TITLE: DIODE BOARD

SIZE D | CODE CS | NUMBER 5411253-0-1 | REV. A | DIST.

SIZE CODE D CS | NUMBER 5411253-0-1 | REV. A



NOTES:

1. APPLY ITEM #8 (THERMAL COMPOUND) BETWEEN S1 AND HEATSINK.
2. TRIM LEADS ON ITEM #76 (THERMOSTAT) TO (5) INCHES AND ATTACH ITEM #84 (PINS) AND ITEM #85 (HOUSING) AS SHOWN.
3. APPLY FLAT WASHER ITEM #72 BETWEEN SCR. HD. AND ETCHED BOARD WHEN MOUNTING COMPONENTS Q19, Q20, Q23, Q25 & D10.
4. PLUS (+) SIGN ON PC BOARD TO BE REMOVED DURING MODULE MANUFACTURE OR WHEN PERFORMING ECO #22. C69 IS INSTALLED WITH + END TOWARDS L2 SIDE OF BOARD). D1, D2, D3 ARE INSTALLED WITH CATHODES TOWARDS HEAT SINK.
5. USE 6 INCH-POUNDS OF TORQUE WHEN MOUNTING Q7, Q23.
6. TRIM EDGES OF MICA WASHERS WHERE THEY PRESS AGAINST HEAT SINK.

CONNECT C21 BETWEEN J1-3 AND J1-1. INSERT LEADS INTO BASE OF CONNECTOR PIN (3 PLACES). CONNECT C21 TO J1-2 AND GROUND ETCH

2		SPACER, ALUM #6, 1/4 AF X 1/8" LG	9009283	86	
1	D1	MTG 6-32	9006951	87	
1	C21	2STR 6 DRAX/35	1512928	88	
2		XSTR 805	1510705-01	89	
1	J1-3	PINS MALE CRIMP	1209318-01	90	
1		MATE-N-LOCK CONNECTOR	1209322-02	91	
2		WASHER RECT	9009769	92	
1	D12	DIODE, ZENER, 8.2V, 5%	1111609	81	
1	C18, 219	CAP 2.2MF 35V 10% TANT	1002431	80	
4		.16 FOAM TAPE	9009087-1	79	
2	R19, R60	RES 5.1 1/4W 5%	1319422	78	
9		PIN FEMALE	1209436	77	
1	S1	THERMOSTAT 85°F	1210824	76	
2		CONTACT, CAPACITOR	CMC 5009730-0-0	75	
1		CONTACT, COMMON CAPACITOR	CMD-5009790-0-0	74	
1		HOLDER, CAPACITOR	C14-5510126-0-0	73	
10		WASHER, #6 INT. TOOTH	9006633	72	
1		NUT #6-32 4-40	9006557	71	
1		SCR PHL PAN HD 6-32 X 3/8 LG.	9006092-1	70	
2		SCR PHL PAN HD 6-32 X 5/16 LG.	9007793-04	69	
12		SCR. PH HD 6-32 X 7/8 LG	9006825-1	68	
10		NUT KEPS #6-32 X 1/4	9006585	67	
3		SCR PHL PAN HD 8-32 X 5/16 LG	9008780-4	66	
1	F1	FUSE 1/2 AMP, PICO	1210979-01	65	
1	F1	FUSE 1/4 AMP, PICO	1210929	64	
1	L2	C-CORE, 100 MH 10A 70% 4445	1511037	63	
1	L1	C-CORE, 22MH, 20A, NMC 4289	1510713	62	
1	Q22	XSTR MJ2500	1510705	61	
1	Q1	XSTR MJ2500	1511705-02	60	
1	Q7, Q23	XSTR D44 H8/B	1511708-2	59	
*	Q3 Q8 Q9 Q11	XSTR XA05	1511706	58	
3	Q15, Q16, Q17, Q18, Q20, Q24	XSTR XA05	1510705	57	
2	Q4, Q12	XSTR 2N5302	1511196	56	
2	Q13, Q14	XSTR 2N5333	1514586	55	
1	Q2, Q5	2STR 855	1512706-01	54	
1	R47	RES 402 .1% 1/8W	1510709-01	53	
1	R36	RES 680 1/4W 5%	1301639	52	
1	R22	RES .2 5W 5%	1309884	51	
3	R26, R35, R50	POT 100, 1/2 W 20% .62 PR	1309150-05	50	
1	R62	RES 1.5M 5% WW	1345872	49	
1	R33	RES .39 2W 5% WW	1310868	48	
1	R10	RES 7.5K 1/2W 1% MF	1305322	47	
4	R25, R34	RES 383 1/8W 1% MF	1305815	46	
6	R2, R5, R6, R11, R12, R3	RES 10K, 1/8 W 1% MF	1305315	45	
4	R9, A1, R7, R16	RES 1K, 1/8W, 1% MF	1305116	44	
2	R27, R36	RES 464 1/8 W 1% MF	1303047	43	
1	R51	RES 100, 3W, PTC	1310927-1	42	
1	R49	RES MT, 1/8W, 1% MF	1302874	41	
*		SOLDER .32 X .062 SOLDER	9009284	40	
* A		TFE TUBING 3/8 L MF	W 07256-11	39	
2	R24, R47	RES 68K 1/8W 5%	1301827	38	
5	R22, R30, R49, R36	RES 10 1/4 W 5%	1301311	37	
3	R18, R39, R57	RES 10K 1/4 W 5%	1305079	36	
1	A	R28, R46, R4, R45	RES 4.3K 1/8 W 5%	1308249	35
1	R55	RES 2.7K 1/2W 5%	1304858	34	
1	R15	RES .05 5W 3% WW	1310.076-02	33	
2	R29, R37	RES 1K 1/4W 5%	1305345	32	
3	R44 R16 R58	RES 330 1/4 W 5%	1302295	31	
1	R18	RES 400 .2W 5%	1302380	30	
7	R15, R17, R23, R31, R35, R42, R53	RES 100 1/4 W 5%	1305229	29	
1	D7	DIODE IN5298B 18V ZENER	1110746	28	
2	D8, D10	DIODE, 20 AMP FAST RECOVERY RECT	1107715	27	
1	D14	DIODE, BRIDGE RECTIFIER	1110714	26	
1	D3	DIODE, 9.1V ZENER	1110925	25	
2	D4, D11	DIODE, IN5626	1103420	24	
2	D1, D2	DIODE IN4004	1103796	23	
2	D5, D6	DIODE IN753A 6.2 V ZENER	1102481	22	
1	D9	DIODE, AZ5 2.4 V ZENER	1101938	21	
1	D13	DIODE IN748A 3.9 V ZENER	1100122	20	
1	C18	CAP 1000PF, 100V, DM	1000042	19	
1	C9	CAP 20 MF 50V ±% STANT	1000003-01	18	
1	C7	CAP 6000 UF 10V -10+75% AL EL	1010704	17	
1	C14	CAP 4500 MF 85V -10+75% AL EL	1010703	16	
2	C1, C2	CAP 8400.0 MF 60V -10% -75%	1010702	15	
1	C16	CAP 100 MF, 25V, 75% AL EL	1002781	14	
1	C3	CAP 1 UF 100V 10%	1011072	13	
2	C8, C5	CAP .22 MF 50V	1010774	12	
2	C6, C17	CAP 6.8 MF 35V 10% STANT	1005306	11	
2	C4, C11	CAPACITOR .033 MF, 100V 10% MYLAR	1000050	10	
1	C20	CAP 2200PF, 250V CER	1000055	9	
A/R		THERMAL COMPOUND	9002826	8	
1		#2 THERMAL STRAP	C-MD-5509811-1	7	
1		#1 THERMAL STRAP	C-MD-5511105-1	6	
1	J2	MATE-N-LOCK CONNECTOR	1209350-05	5	
1	J1	MATE-N-LOCK CONNECTOR	1209322-03	4	
1		HEAT SINK	1510556	3	
1		SPLIT LUG	9006735	2	
1		ETCHED BOARD	5009329	1	
		MODULE ECO HISTORY	B-M-5409728-0-0		
		X-Y COORDINATE HOLE LOC	X-Y-5409728-0-0		
		CIRCUIT SCHEMATIC	SCH-5409728-0-0		

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2	C21, C22	CAPACITOR .10uF 100V	1013.776	93
2		WASHER, THERMAFILM	9009993-01	96
2		WASHER, MICA	9009993-00	97
6		WASHER #6 SPLIT	9007801	94
1		5409728 INTERPLANT/CUSTOMER PKG	A-PI-3700615-0-0	83
		MANUFACTURING SPECIFICATION	A-SP-5409728-0-3	82
		ASSEMBLY PROCEDURE	A-SP-5909128-0-3	81
		INSPECTION PROCEDURE	A-SP-5409722-0-0	80
		MANUFACTURING TEST PROCEDURE	A-SP-5409728-0-3	69

FIRST USED ON ASY/MODEL: 11/05

ETCH BOARD REV: E

IC TYPE	GND	-5 SV	
IC PIN LOCATIONS			

ITEM NO	AWG	FROM PT	TO PT
JUMPER LIST			

DEC. NO.	EXA NO
SEMICONDUCTOR CONVERSION CHART	

DEC. NO	EXA NO

HEAT SINK ASSY: 0-MD-7008731-0-0

EQUIPMENT CORPORATION

TITLE: REGULATOR BOARD

SIZE: A | DWG NO: E14 5409728-0-0 | REV: E

SHT 1 OF 1

(THERMOSTAT NORMALLY CLOSED)

J3-1 S1 J3-2

INPUT 28-0-28V AC 47-63HZ

J1-3 AC, J1-1 CENTER TAP, J1-2 AC

C21 1mf, C22 1mf

NSS-3514 D14

F1, 15A

R45 4.7K 1/2W

R55 2.7K 1/2W

C2 24KUF 50V, C1 24KUF 50V

D13 IN748A 3.9V

J2-4 LTC L OUTPUT

R33 .39 2W

Q1 MJ2500

R32 100, Q2 855

R34 383 1%, R35 100, CW, R37 1K, R36 464 1%

D6 IN753A, 6.2V

J2-5 +15V OUTPUT

C16 100 UF 25V

R38 10K, R56 680, C20 2200MF 50V, Q3, C18 1000PF, Q4 XA05

+39V

C3 1mF

R41 .022 7W, 3%

Q6 2N 5302

L1 100 UH 20A

D10, 20A FAST RECOVERY

J2-3 +5V OUTPUT

C7 6000 UF, 10V

D11 IN5624

D12 5.7V 2%

R54 10

R39 5.1, R40 5.1, Q5 855

C4 .033UF

R42 100, Q7 D45H8, Q8

R52 1 5W

Q11 C32AX135

R53 100, C8 .22 UF

R46 4.7K 1/2W, R47 68K, R49 147 1%

Q9, R43 10K

C5 6.8UF 35V 10%

D9 2.4V AZ5, Q10 XA05

R50 100 CW

R16 330, C17 6.8UF 35V 10%, R44 330

R51 100 3% P.T.C.

D2 IN4004, D1 IN4004

R14 1K 1%, R1 1K 1%

−26V

C9 20UF 5%

R3 10K 1%, R5 10K 1%, R6 10K 1%

−8.3V, Q17 A05, Q18 A05, −11.4V

J2-6 BUS DC LO L OUTPUT

J2-8 PWR OK L, J2-7 PWR OK ENABLE OUTPUT, J2-1 BUS AC LO L

R2 10K 1%, −10V, Q15 A05, Q16 A05, D3 5.1V, Q19

R18 100 2W, R17 100, Q12 GPS A05, Q14

R11 10K 1%, R10 7.5K 1%, R12 10K 1%, R15 100

R8 1K 1%, R7 1K 1%

C19 2.2UF 35V 10%, R29 1K, R28 4.7K 1/2W, R27 464 1%

R58 330, D4, 6.2V IN 753A, Q26

R57 10K, XA05 Q25

C12 2.2UF 35V

R24 68K, R26 100 1/2W, R25 383 1%

D5, 20A FAST RECOVERY

C14 3000UF 25V, Q27 MAC11-3

R31 100, C15 .22 UF, J2-2 GROUND OUTPUT

R30 10

C11 .033UF 100V

Q24 XA05, R23 100, Q21 B05, R22 .2 5W, R21 10, Q23 D45H8, R20 10

R19 .06 5W 3%WW, Q22 2N 5302

L2 100UH 10A

D6 IN5624, D7, 18V IN5248B

J2-9 −15V OUTPUT

R4 4.7K 1/2W, F2, 10A, −39V

UNLESS OTHERWISE INDICATED:
1% RESISTORS ARE 1/8W
VOLTAGES ARE TAKEN AT NO LOAD WITH 115 VAC LINE
VOLTAGES ARE ± 10% TAKEN BY A ≥ 10K/V METER
TRANSISTORS = XA55

QTY	REF DESIGNATION	DESCRIPTION	PART NO	ITEM NO.

PARTS LIST

ETCH BOARD REV E

REV	REVISIONS	CHANGE NO.	CHK	DATE
AB	ECO 5409728-ML027		A. BARON	8-7-72
AA	REVISED PER ECO 5409728-00026		A. BARON	5-MAY-72
Z	ECO 5409728-00025		A. BARON	29 JUNE 71

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN. Fisher DATE 12-20-71
CHK'D Manny Moore DATE 12-21-71
ENG. P Hall DATE 12-29-71
PROJ. ENG. M. A. Mulligan DATE 12-29-71
PROD. R.V. Peterson DATE 12-29-71
NEXT HIGHER ASSY
SCALE
SHEET 1 OF 1

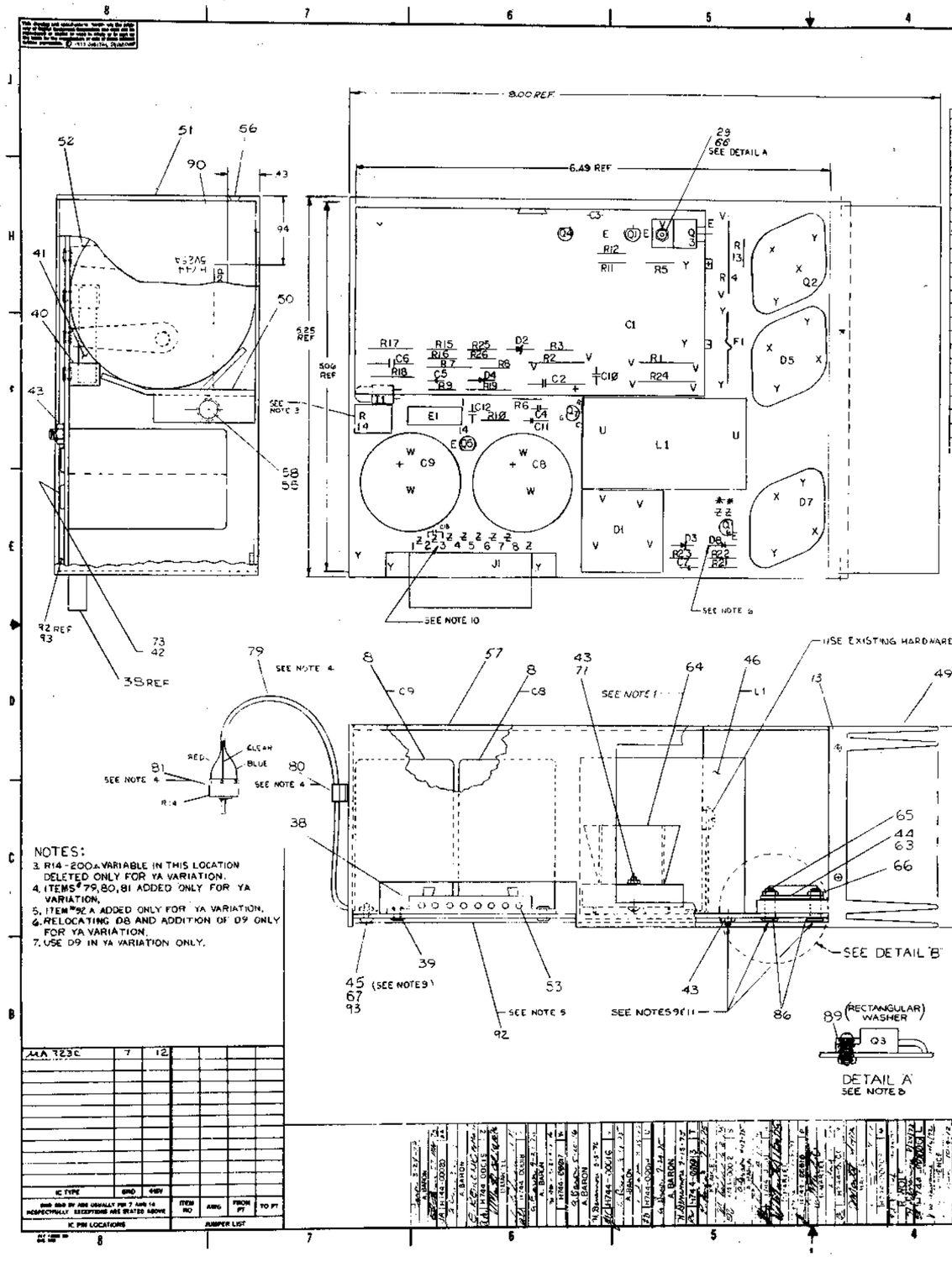
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE REGULATOR BOARD FOR H740

SIZE D CODE CS NUMBER 5409728-0-1 REV AB

DIST

MC



NOTES:

3. R14 - 200Ω VARIABLE IN THIS LOCATION DELETED ONLY FOR YA VARIATION.
4. ITEMS #79, 80, 81 ADDED ONLY FOR YA VARIATION.
5. ITEM #92 A ADDED ONLY FOR YA VARIATION.
6. RELOCATING D8 AND ADDITION OF D9 ONLY FOR YA VARIATION.
7. USE D9 IN YA VARIATION ONLY.

NOTES:

1. APPLY ITEM #63 (COMPOUND) BETWEEN TRANSISTOR (Q2), DIODES (D5, D7) AND ITEM #44 (WASHER) ALSO BETWEEN ITEM #49 (WASHER) AND HEAT SINK (ITEM #49). ALSO APPLY ITEM #63 (COMPOUND) BETWEEN ITEM #9 (DIODE BRIDGE) AND ITEM #64 (HEAT SINK BRIDGE).

NOTES CONT:

NOTE 8:
(1) Q3 SCREW HEAD SHOULD BE ON TOP OF FLAT RECTANGULAR WASHER AS SHOWN. APPLY 8 INCH LBS. OF TORQUE WHEN SECURING Q3 TO CKT. BOARD BEFORE SOLDERING.

NOTE 9: TORQUE APPLICATION
1. APPLY ½ INCH LBS OF TORQUE TO THE SCREWHEAD OF #4 HARDWARE EXCEPT Q3.
2. APPLY ½ INCH LBS OF TORQUE TO #6 HARDWARE ON L1.
(3) APPLY ½ INCH LBS OF TORQUE TO ALL #6 AND #10 HARDWARE EXCEPT ON L1.
4. ALL HARDWARE TO BE TORQUED BEFORE SOLDERING.

NOTE 10
INSERT C13 INTO ETCH PAD HOLES CONNECTED TO J1 TERMINALS, 2-3.

NOTE 11:
MIN. TORQUE REQUIRED FOR QC INSPECTION:
8 INCH LBS FOR #4 HARDWARE.
12 INCH LBS FOR #6 AND #10 HARDWARE.

*SEE NOTE 7

744-YA	744-YB					
1	1	R22	RES 680 1/4W 5%	1301424	69	
1	1		PACKING INSTRUCTIONS	API 3700074-0070	70	
1	1		SCR, PHL PAN HD 6-32 x 5/8 LG	9006025-1	71	
1	Ø	11	15 VOLT LAMP	1209169	72	
4	4		LOCKWASHER #10 INT	9006635	73	
AR/AR			COMPOUND, HEAT TRANSFER	9007268	74	
AR/AR			TFE TUBING	9007302-11	75	
AR/AR			TFE TUBING	9007328-11	76	
1	1	Q4	TRANSISTOR 2N4232	1510558	77	
AR/AR			SILICONE GREASE	7487496-05	78	
1	Ø	12 IN	WIRE, MICRODOT	1700014	79	
1	Ø		CLAMP, CABLE	9007079	80	
1	Ø	R14	POT, 10 TURN, 1KΩ	1309532-04	81	
1	Ø	R17	RES, 300Ω 1/4W 5%	1301425	82	
1	Ø	R18	RES, 150Ω 1/4W 5%	1300250	83	
1	Ø	R9	RES, 86Ω 5W 3%	1310876-02	84	
1	Ø	D3	DIODE ZENER IN754	1109991	85	
6	6	-	WASHER, INT TOOTH #4	9006632	86	
1	1	C7	CAP .22 μF 50V	1010274	87	
1	1	R13	RES 10 1/4W 5% FUSIBLE	1312496	88	
1	1	-	WASHER, RECTANGULAR	9009769	89	
1	1	-	DECAL (H744)	A0C7416945-10	90	
1	1	-	JUMPER	1214074	91	
1	Ø	-	COVER, BOTTOM	7419952	92	
2	Ø	-	WASHER, FIBER	9008848	93	

1	1		5 VOLT LAMP	12-05219-1	68
1	1		LOCKWASHER #4	9006632	67
1	1		NUT, KEPS #4-40	9006537	66
1	1		SCR PHL PAN HD #4-40 x 3/16 LG	9008033-1	65
1	1		HEAT SINK BRIDGE	1210907	64
AR	AR		COMPOUND, THERMAL JOINT	9008268	63
1	1	R26	RESISTOR 1.5K 1/4W 5%	1300391	62
1	1	R19	RESISTOR 7.8K 1/8W 1%	6805322	61
1	1	R3	RESISTOR 1K 1/4W 5%	1300483	60
1	1	Q7	TRANSISTOR, UNIJUNCTION 2N4871	1510877	59
1	1		SCR PHL PAN HD #6-32 x 1/4 LG	9006020-1	58
1	Ø		COVER	SC-MD-5307700-01	57
1	1		SCR PHL FLT HD #6-32 x 3/16 LG	9008520-2	56
1	1		WASHER, LOCK #6	9006633	55
1	1		SCR PHL FLT HD #4-40 x 3/16 LG	9006019-2	54
1	1		CONTACT, FEMALE	1209956	53
1	1		STRAP, CAPACITOR	C-MD-5306759-04	52
1	1		BRACKET, REGULATOR	D-IA-5307956-01	51
1	1		HOLDER, CAPACITOR 2.5	C-IA-12368-00	50
1	1		HEAT SINK REGULATOR	D-PS-1210737-01	49
1	1	C5, C12	CAP 56 PF	1000018	48
1	1	R24	RESISTOR 10 1W	1300171	47
1	1	L1	REACTOR 60 MHY MMC 4347	1610850	46
2	2		SCR, PHL PAN HD #4-40 1/4 LG	9008201-1	45
3	3		WASHER, INSULATOR	9006721	44
3	3		NUT, KEPS #6-32	9008185	43
4	4		SCR #10-32 x 3/1 SLOTTED PAN HD	9003669-01	42
1	1	F1	FUSE 15 AMP	1213237-01	41
2	2		FUSE CLIP	9007205	40
6	6		EYELET 66-4-5	9009000	39
1	1	J1	MATE-N-LOK CONN, 8 PIN	1209340	38
1	1	E1	INTEGRATED CIRCUIT UPC 1230	1910415	37
1	1	Q5	TRANSISTOR A05	1510705	36
1	1	Q3	TRANSISTOR D45H8	1510708-1	35
3	3	Q1, Q6, Q4	TRANSISTOR MPSA65 MOT	1510706	34
1	1	Q2	TRANSISTOR 2N5302	1510196	33
Ø	1	R14	RES VARIABLE 200	1310852	32
1	1	R21	RES 5.1 1/4W 5%	1309422	31
1	1	R23	RES 100 1/4W 5%	1300229	30
1	1		SCR, PAN #4-40 x 7/8	9006011-1	29
1	1	R11	RES 27 1/4W 10%	1301420	28
Ø	1	R17	RES 750 1/8W 1%	1302855	27
1	1	R9	RES 27 1/4W 5%	1301522	26
1	1	R7	RES 182K 1/8W 1%	1303412	25
2	2	R8, R16	RES 1K 1/4W 5%	1300385	24
Ø	1	R18	RES 511 1/8W 1%	1302411	23
1	1	R25	RES 18K 1/4W 5%	1302465	22
2	2	R6, R15	RES 10K 1/4W 5%	1300479	21
Ø	1	R4	RES 02 5W 3%	1310876	20
1	1	R2	RES 820 1W 10%	1300858	19
1	1	R1	RES 3.9K 1W 10%	1302927	18
1	1	R5	RES 10 1/4W 5%	1301317	17
2	2	R12, R10	RES 150 1/4W 5%	1300860	16
Ø	1	D3	DIODE ZENER 1 MA. 5.1V	1110925	15
1	1	D7	SCR MCR 6491-2	1109465	14
4	4		SCR, PFH #4 x 5/16, SELF TAP	9009142	13
1	1	D5	DIODE PWR NSP 8117	1110715	12
3	2	D4, D8 D9 *	DIODE PWR D66A	1100114	11
1	1	D2	DIODE ZENER IN4744	IIC 5648	10
1	1	D1	DIODE BRIDGE	1110714	9
2	2	C8, C9	CAP 6K MF 10V	1100704	8
1	1	C1	CAP 31 K MF 50V	1040858	7
2	2	C4, C3	CAP 80 μF 25 V	1001774	6
1	1	C2	CAP .033 μF 100 V 10%	1000050	5
1	1	C11	CAP 2700PF 100V 5% DM	1001637	4
2	2	C10, C13	CAP .01 μF 100V 20% DISC	1001010	3
1	1	C6	CAP 2.2 μF, 20V, 109	1002627	2
1	1		ETCHED CIRCUIT BOARD	5009725	1
			ASSY, DRILLING HOLE LAYOUT	D-AH-H744-B-5	
			X-Y COORDINATE HOLE LOCATION	ECO-H744-Ø-Ø	REF
			MODULE ECO HISTORY	D-MH-H744-Ø-Ø	REF
			CIRCUIT SCHEMATIC	D-S-H744-Ø-1	REF
QTY	QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	

PARTS LIST

D66A	IN3606		
IN4749			

DEC NO.	ECO NO.	DEC NO.	ECO NO.

SEMICONDUCTOR CONVERSION CHART

MA 723C	7 / 12

IC TYPE	GND	+6V
900 900 BY ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

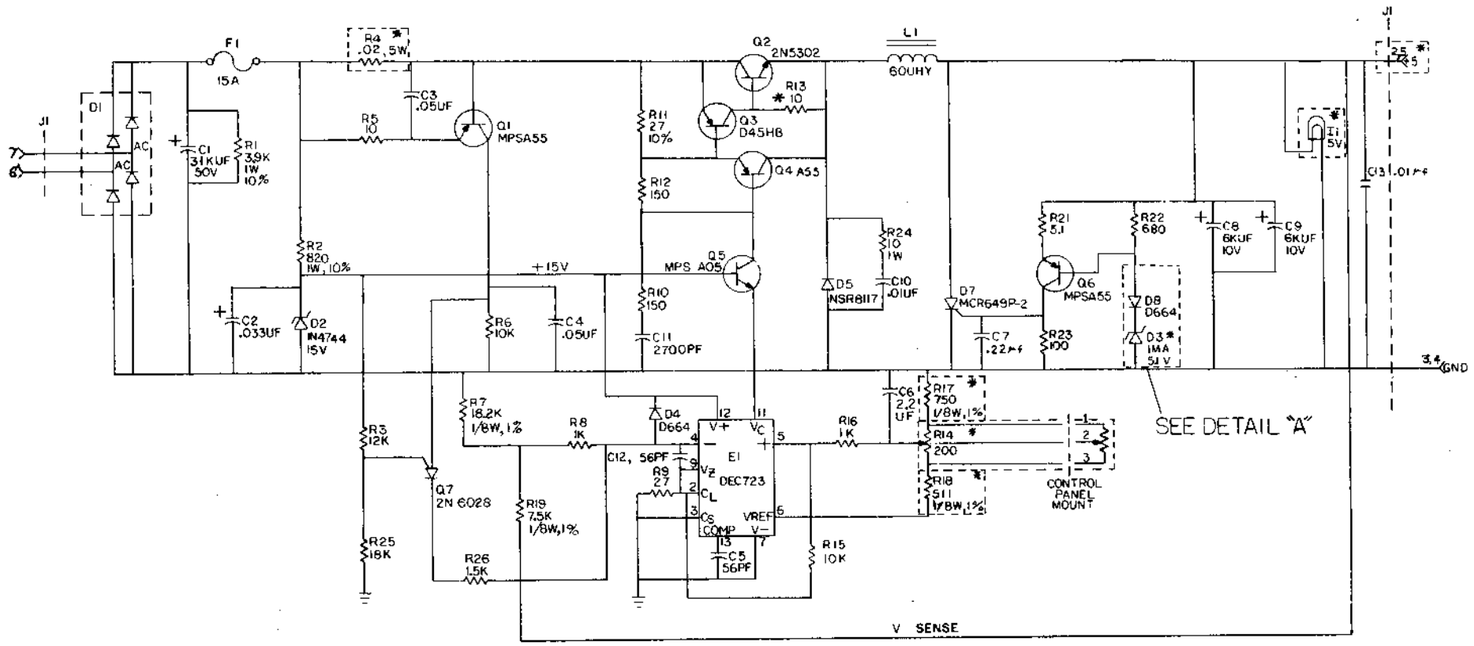
FIRST USED ON ORTHOD D-UA-H742A-Ø-Ø

ETCH BOARD REV H

EQUIPMENT CORPORATION

5V REGULATOR

SCALE 2/1 | SHEET 1 OF 1 | SIZE E | DRAWING E UA H744-D-Ø | REV A4



*FUSIBLE RESISTOR

* FOR YA VARIATION COMPONENT VALUES ARE AS FOLLOWS:
R4 - .06 5W
R14 - 1K 10 TURN
R17 - 300 1/8W 1%
R19 - 150 1/4W 5%
D3 - 1N754
I1 - 15V
J1-2,5 - +2.0-8.0V

* D9 - D664 ADDED FOR YA VARIATION ONLY

UNLESS OTHERWISE INDICATED:
RESISTORS ARE 1/4W, 5%

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV F H

DEC NO.	EIA NO.
1N964A	SAME
D664	1N3606
MCR649P-2	
1N751A	SAME
1N4744	SAME
NSR8117	
2N6028	

SEMICONDUCTOR CONVERSION CHART

DEC NO.	EIA NO.
MPSA55	
2N5302	
D45H8	
MPSA05	

REVISIONS

REV	CHANGE NO.	CHK	
V	H744-00018	D. MARTEL	12-16-75
U	H744-00016	A. BARON	5-30-75
T	H744-00015	A. BARON	5-28-75
S	H744-00014	A. BARON	5-28-75
R	H744-00013	K. SARGENT	7-7-75
P	H744-00012	A. BARON	5-28-75
N	H744-00011	A. BARON	5-14-75
M	H744-00010	D. MARTEL	1-17-75
L	H744-00009	D. MARTEL	1-17-75
K	H744-00008	R. WOLF	9/11/74
H	H744-00007	R. WOLF	8/26/74
F	H744-00006	R. WOLF	8/5/74
E	H744-00005	G. POTTER	6/3/74
D	H744-00004	G. POTTER	5/31/74
C	H744-00003	G. POTTER	5/21/74
B	H744-00002	G. POTTER	5/17/74
A	H744-00001	G. POTTER	5/14/74

DRN	K. Sargent 7-8-75
CHK'D	Mark Hayes
ENG	R. Wolf 7/8/75
PROJ	R. Wolf 7/8/75
PROG	
NEXT HIGHER ASSY	
SCALE	
SHEET	1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: 5V REGULATOR

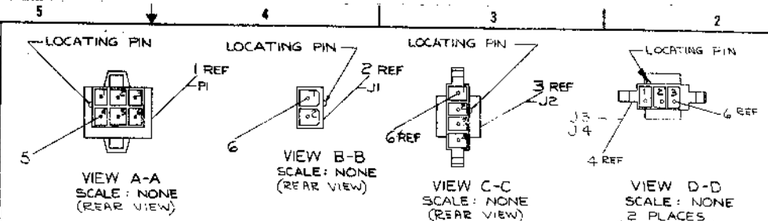
SIZE D | CODE CS | NUMBER H744-0-1 | REV V

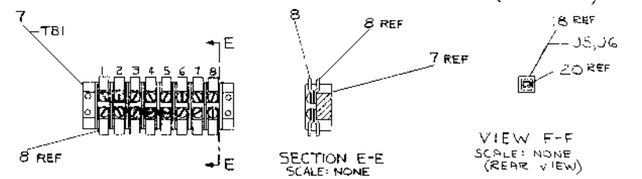
DIST.

H744-0-1 REV V

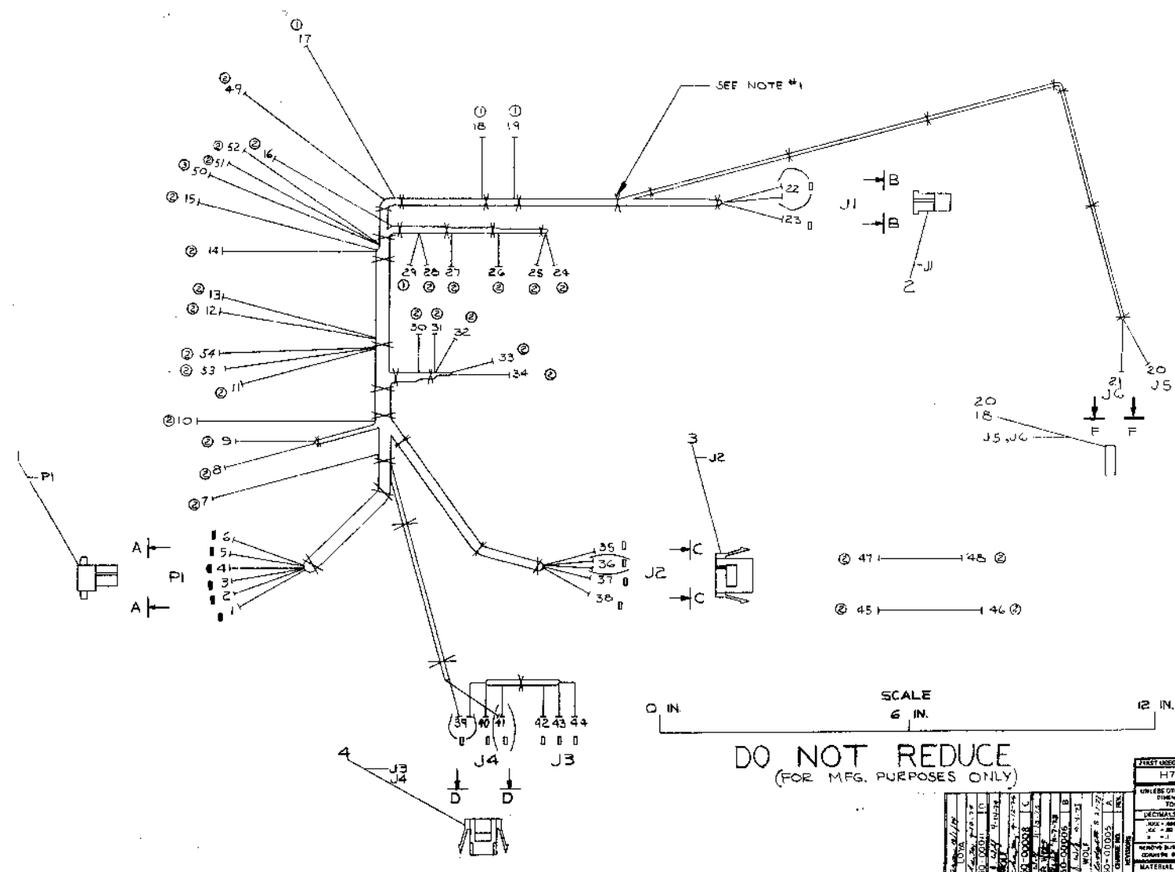
WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	FROM TERM	TO POINT	TO CONN	TO TERM	WIRE LENGTH	SIGNAL
12	14	RED	1	P1-1	5	12	——	10	12	
11	"	BLK	2	P1-2	"	30	TB1-1	"	9	
14	"	WHT	3	P1-3	"	7	——		10	
12	"	RED	4	P1-4	"	32	TB1-2		9.5	
12	"	RED	5	P1-5	"	34	TB1-4		10.5	
14	"	WHT	6	P1-6	5	33	TB1-3		9.7	
17	"	RED	8	——	10	24	TB1-8		13.5	
14	"	WHT	9	——	10	26	TB1-6		12	
21	"	ORN	10	——	10	15	——		13.5	
13	"	VIO	11	——	10	14	——		9.2	
12	"	RED	13	——	10	31	TB1-2	1	7	
11	14	BLK	16	——	10	28	TB1-1	10	5.2	
15	18	BLK	17	——	9	22	J1-1	6	14	
15	18	BLK	39	J4-1	6			6	22.2	
15	18	BLK				42	J3-1	6	3.5	
17	18TWP	RED	18	TB1-4	9	20	J5	18&20	23.5	
		WHT	19	TB1-6	9	21	J6	18&20	22	
10	18	BLU	23	J1-2	6	35	J2-1	6	22	
12	4	RED	25	TB1-5	10	38	J2-4	6	16	
14	14	WHT	27	TB1-3	10	37	J2-3	6	13	
15	18	BLK	29	TB1-1	9	36	J2-2	6	13	
15	18	BLK			6				17	
15	18	BLK	41	J4-3		44	J3-3	6	3.5	
12	14	RED	45	TB1-4	10	46	TB1-7	10	2.5	
14	14	WHT	47	TB1-3	10	48	TB1-5	10	2.0	
15	18	BLK	40	J4-2	6	43	J3-2	6	3.5	
11	14	BLK	49	——	10	50	——	22	6	
15	18	BLK	53	K1-3	10	51	PS3-6	10	6	
15	18	BLK	54	K1-4	10	52	PS3-7	10	6	





NOTES:
1. USE TIE WRAPS (X) (ITEM #16) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY AND AT BREAKOUT POINTS.



DO NOT REDUCE
(FOR MFG. PURPOSES ONLY)

ITEM	QTY.	DESCRIPTION	PART NO.	FSCM NO.
		PARTS LIST		
22	1	TERM, SOLDERLESS #30-24	9007928	
21	8/R	WIRE, #16 STRD, ORN	9107370-39	
20	2	MINI-FASTABS, #62241-1	1210826-2	
19	5/R	WIRE, #24/7 STRD, BLU	9107360-66	
18	2	HOUSING, 1-480417-0	1210820-1	
17	8/R	WIRE, #18 AWG STRD TWP #22 WHT	9107430-29	
16	X A/R	TIE WRAP, PANDUIT, #SST1M	3007031	
15	12"	WIRE, #18 STRD, BLK	9107360-00	
14	A/R	WIRE, #14 STRD, WHT	9107370-55	
13	A/R	WIRE, #14 STRD, VIO	9107370-77	
12	A/R	WIRE, #14 STRD, RED	9107370-22	
11	A/R	WIRE, #14 STRD, BLK	9107370-00	
10	29	CONN, SOLDERLESS, AMP #30356	9007919	
9	4	CONN, SOLDERLESS, AMP #62502	9007917	
8	32	TERM, PIN, OFFSET, AMP #62145-1	9007178	
7	1	TERM, BLOCK, CINCH #8-560	9006509	
6	12	SOCKET TERM, CONTACT (MALE)	1209379-01	
5	6	PIN CONTACT (MALE)	1209378-01	
4	2	CONN, MATE-N-LOCK, 9 PIN	1209350-08	
3	1	CONN, MATE-N-LOCK, 6 PIN	1209280-04	
2	1	CONN, MATE-N-LOCK, 2 PIN	1210521-02	
1	SYM 1	CONN, MATE-N-LOCK, 6 PIN	1209351-06	

FIRST USED ON OPTION INCLUDE: H75Ø

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX ± .005, .XX ± .01, .X ± .1
ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY
MATERIAL SEE PARTS LIST
FINISH

DRAWN 10-24-77
CHECKED 10-24-77
ENGR 10-24-77
MFG
QUAL
NEXT HIGHER ASSY. H-UA-H75Ø-B-B
SCALE 1/1
SHEET 1 OF 1

ENCODER EQUIPMENT CORPORATION
TITLE: H75Ø POWER SUPPLY HARNESS
SIZE E | CODE IDENT NO. | NUMBER IA 7009207-0-0 | REV. D
DWG. NO. IA 7009207-0-0

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

	SEQUENCE
DWG. DIRECTORY	6-DD-BCØ5H-Ø
LINE SET 115V	C-UA-BCØ5H-Ø-Ø
LINE SET 230V	C-UA-BCØ5J-Ø-Ø
A.C INPUT BOX	D-UA-H4ØØ-Ø-Ø
A.C INPUT BOX (P.L)	A-PL-H4ØØ-Ø-Ø
PWR CONTROL BD. 115V	C-1A-5409824-Ø-Ø
PWR CONTROL BD. 230V	C-1A-5409825-Ø-Ø

UNIT VARIATIONS

VARIATION	TITLE	PRINT SET TYPE: BCØ5H-1
BCØ5H	LINE SET 115VAC 7 AMP	X
BCØ5J	LINE SET 230VAC 5 AMP	X

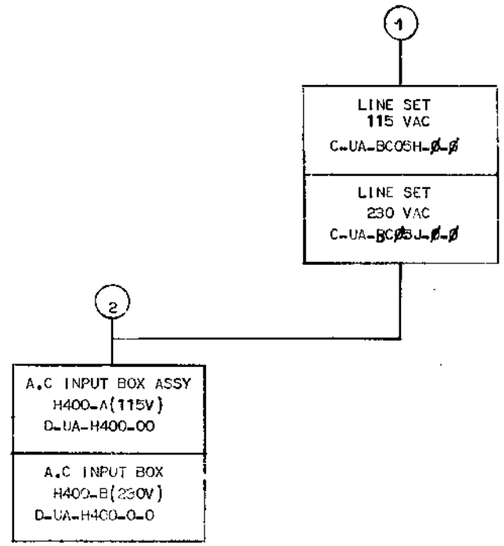
REVISIONS	REV	CHG. NO.	DATE

USED ON OPTION/MODEL	
11/07	

DRN. D. FONTAINE	DATE 4/5/72	TITLE: LINE SET
CHK'D	DATE 4-15-72	
PROJ ENG.	DATE 4-18-72	
PROD	DATE 5/1/72	SIZE B · CODE DD · NUMBER BCØ5H-Ø · REV
FIELD SERV.	DATE 5/5/72	
SHEET 1 OF 3		DIST

DRB 106

DEC 16-(325)-1062-1-N871



TITLE	SHEET 2 OF 3	SIZE	CODE	NUMBER	REV
LINE SET		B	DD	BCØ5H-Ø	

DRB 107
DEC 16-(325)-1062-3-N871

ELECTRICAL

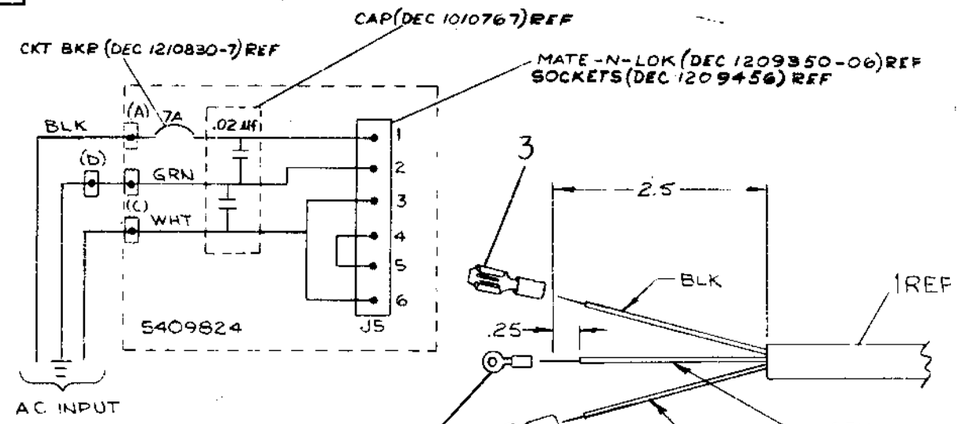
CUSTOMER PRINT SET						SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
BC05-H-1						MFG.						
X							2.	C-IA-5409824-0-0		1	POWER CONTROL BD 115V	H400
X								C-IA-5409825-0-0		1	POWER CONTROL BD 230V	H400

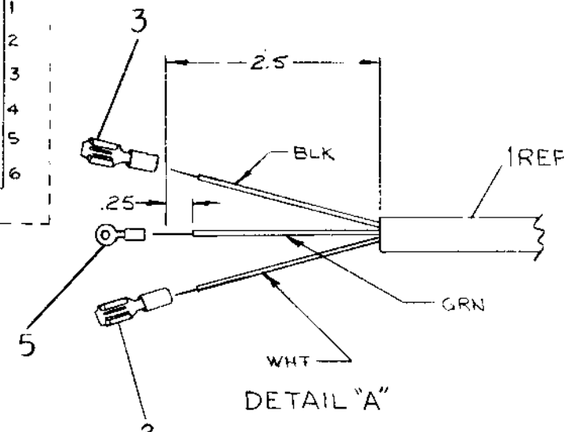
MECHANICAL

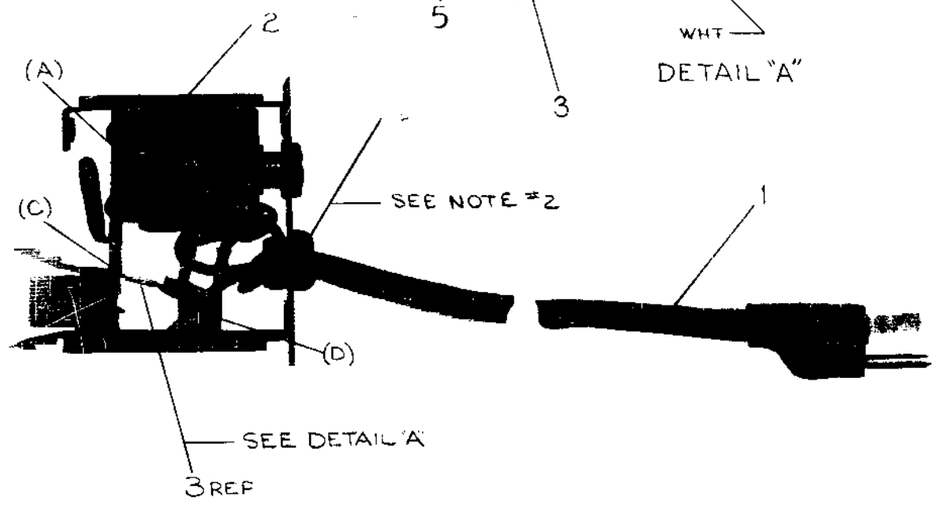
CUSTOMER PRINT SET						SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
BC05-H-1						MFG						
X							1.	C-UA-BC05H-0-0		1	LINE SET 115V 7 AMP	BC05H
X								C-UA-BC05J-0-0		1	LINE SET 230V 5 AMP	BC05J
X							2.	D-UA-H400-0-0		1	AC INPUT BOX	H400
X								A-PL-H400-0-0		1	A,C INPUT BOX PARTS LIST	H400
								D-IA-5309845-0-0		1	BOX	H400
								C-MD-5309849-0-0		1	COVER	H400
								A-DC-5309899-0-0		1	PWR CONTROL DECAL 115V	H400
								A-DC-5309900-0-0		1	PWR CONTROL DECAL 230V	H400

TITLE		SIZE	CODE	NUMBER	REV
LINE SET	SHEET 3 OF 3	B	DD	BC05H-0	

NOTES:
1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS







SHOWN WITHOUT COVER

ITEM NO.	PART NO	DESCRIPTION	QTY
5	9007929-0	TERMINAL, RING, RED	1
4	9008492-2	STRAIN RELIEF SR-6N3-4	1
3	9007970	CONNECTOR, FASTON, RED	2
2	D-UA-H400-0-0	AC INPUT BOX H400A	1
1	1700015-6	POWER CORD 120V	1

PARTS LIST

REVISIONS	CHK	CHANGE NO.	REV.
		BC05H-00001	A
		BC05H-00002	B
		BC05H-00003	D
		H400-00002	C
		BC05H-00005	E

FIRST USED ON OPTION/MODEL: 11/05

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = 1; ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. T Guillin DATE 12-2771
CHK'D J Hatem DATE 1-6-72
ENG. David DeMunnik DATE 1-4-72
PROJ. ENG. R DATE 1-7-72
PROD. RK Peterson DATE 1/21/72
NEXT HIGHER ASSY.
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: LINE SET 115VAC 7AMP

SIZE C | CODE UA | NUMBER BC05H-0-0 | REV. E

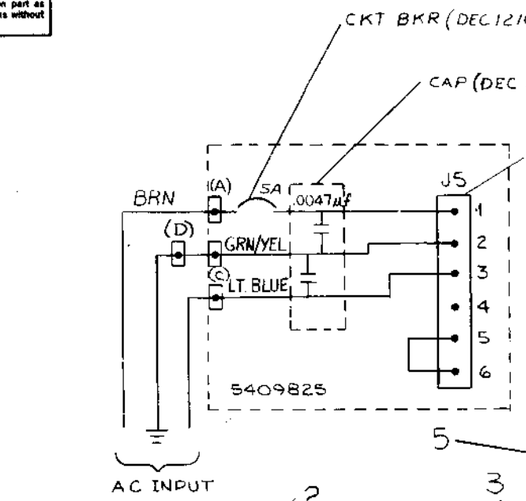
DIST.

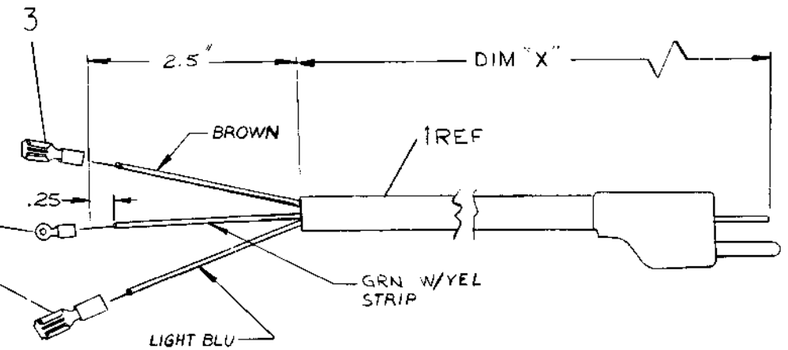
DEC FORM NO. DRC 100-A

LEGEND	
VARIATION	DIM "X"
BC05J	3 FT
BC05J-06	6 FT

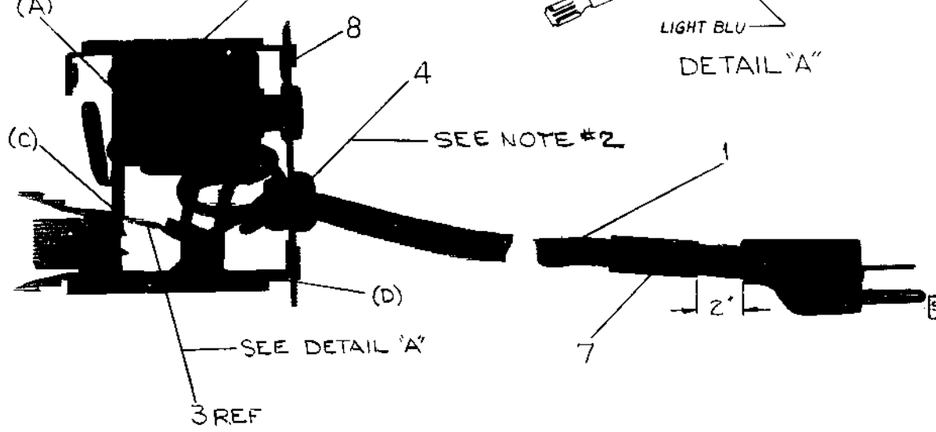
NOTES:

1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HAYCO #29 STRAIN RELIEF PLIERS.
3. APPLY ID CABEL (ITEM #6) TO BACK COVER ON SIDE OF UNIT.





DETAIL "A"



SHOWN WITHOUT COVER

QTY.	DESCRIPTION	PART NO.	ITEM NO.
~~2~~	~~TIE WRAP~~	~~3007031~~	~~9~~
1	U DECAL	3612063	8
1	AC LINE CORD WARNING LABEL	3611448	7
1	POWER SUPPLY LABEL	9009255-01	6
1	TERMINAL, RING, RED	9007929-0	5
1	GROMMET HEYCO SR-6N3-4	9008492-2	4
2	CONNECTOR, FASTON, RED	9007970	3
1	AC INPUT BOX H400B	DUA-H400-0-0	2
1	POWER CORD 240V	1700043	1

SEE NOTE 3

PARTS LIST

FIRST USED ON OPTION/MODEL: 11/05

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	±0° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

		DATE
DRN	T. Guillon	12-27-71
CHKD	[illegible]	1-4-72
ENG.	[illegible]	1-4-72
PROJ ENG.	[illegible]	1-7-72
PROD	R.K. Peterson	1/7/72

NEXT HIGHER ASSY.

SCALE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: LINE SET 230V AC 4 AMP

SIZE	CODE	NUMBER	REV
C	UA	BC05J-0-0	H

DIST.

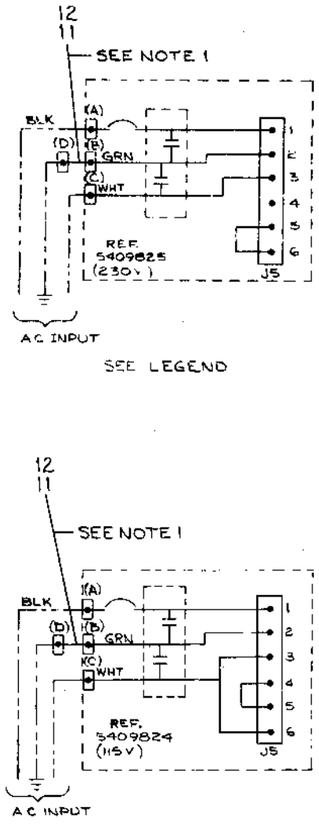
REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	BC05J-00001	A	
Wolff	WOLFF		
[illegible]	H400-00002	B	5-25-72 R. BURTON
[illegible]	BC05J-00002	C	11-2-72 R. BURTON
[illegible]	BC05J-00003	D	12-20-72 R. BURTON
[illegible]	BC05J-00005	E	1-2-73 R. KENNEDY
[illegible]	BC05J-00006	F	4 JAN 74 A. BARON
[illegible]	BC05J-00007	H	3-24-78 A. BARON

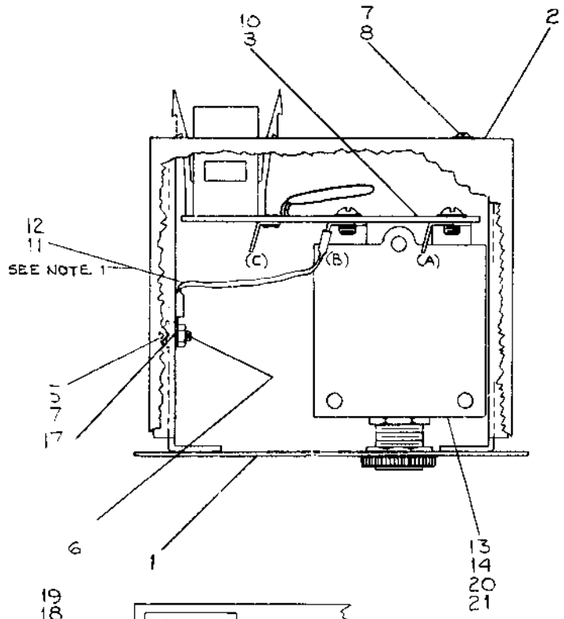
DEC FORM NO. DRC 100-A

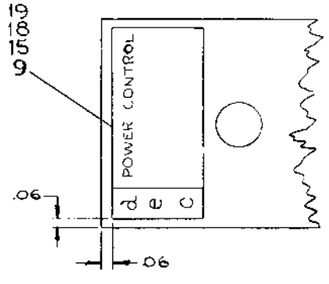
LEGEND		
NUMBER	VARIATION	USED ON
H400-A	115 VAC 7AMP	BC05H
H400-B	230 VAC 4AMP	BC05J
H400-C	115 VAC 10AMP	BC05T
H400-D	230VAC 5 AMP	BC05U

NOTES:

1. ITEM #11 (WIRE) AND TWO OF ITEM #12 (FASTON TABS) ARE TO BE CONNECTED FROM POINT D TO POINT B.







REVISIONS				
CHK	CHANGE NO.	REV.		
	H400-00002	A		
R BURTON				
	H400-00003	B		
R. BURTON				
	H400-00004	C		
R BURTON				
	H400-00005	D		
R. BURTON				
	H400-00007	E		
R. BURTON				
	H400-00008	F		
R. WOLF				

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO.
D-UA-BC05H-0-0		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .01, .X ± .1; ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

		DATE
DRN	T Sparkle	12-22-71
CHKD		12-1-72
ENG		1-4-72
PROJ ENG		1-7-72
PROD	R W Peterson	1/3/73

NEXT HIGHER ASSY: D-UA-BC05H-0-0
SCALE
SHEET OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: AC INPUT BOX ASS'Y

SIZE	CODE	NUMBER	REV
D	UA	H400-0-0	F

DWG

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY TYRONE QUILLIN	CHECKED [illegible]	SECTION 1
DATE 12-1-71	DATE 1-4-72	
ENG David Lo Mascolo	PROD R.K. Peterson	ISSUED SECT. 1
DATE 1-4-72	DATE 1/12/72	

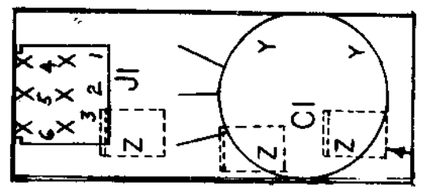
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION H400-A (115V)	H400-B (230V)	H400 C (115V)	H400 D (230V)
1	D-IA-5309845-0-0	BOX	1	1	1	1
2	C-MD-5309849-0-0	COVER	1	1	1	1
3	C-IA-5409825-0-0	POWER CONTROL BOARD (230V)	–	1	–	1
4	~~9007113~~	~~DOUBLE FASTAB~~	~~1~~	~~1~~	–	–
5	9006022-1	SCR PHL PAN HD #6-32 x 3/8 LG	1	1	1	1
6	9008185	KEP NUT HEX HD #6-32	1	1	1	1
7	9006633	WASHER INT. #6	2	2	2	2
8	9006020-1	SCR PHL PAN HD #6-32 x ¼ LG	1	1	1	1
9	A-DC-5309899-0-0	PWR CONTROL DECAL 115V	1	–	–	–
10	C-IA-5409824-0-0	POWER CONTROL BOARD (115V)	1	–	1	–
11	9107360-55	#18 AWG STRD ~~TEF INS~~ (GRN 3 IN.LG)	1	1	1	1
12	9007917	FASTON TABS	1	1	1	1
13	1210830-4	CRK BREAKER (WOOD 4 AMP)	–	1	–	–
14	1210830-7	CRK BREAKER (WOOD 7 AMP)	1	–	–	–
15	A-DC-5309900-0-0	PWR CONTROL DECAL (230V)	–	1	–	–
~~16~~	~~9006632~~	~~WASHER 4 INTERNAL TOOTH~~	~~1~~	~~1~~	~~1~~	~~1~~
17	9007929-01	CRIMP-ON EYELET	1	1	1	1
18	A-DC-7410727-0-0	PWR CONT DECAL	–	–	1	–
19	A-DC-7410726-0-0	PWR CONT DECAL	–	–	–	1
20	1210830-5	CKT BREAKER (WOOD 5 AMP)	–	–	–	1
21	1210830-10	CKT BREAKER (WOOD 10 AMP)	–	–	1	–

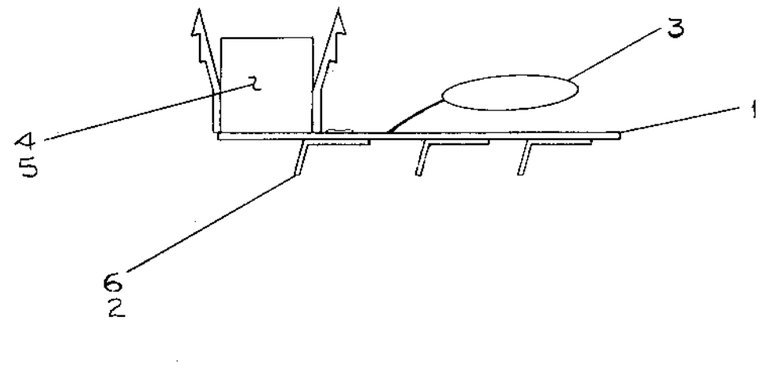
TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
AC INPUT BOX ASS'Y	D-UA-H4ØØ-Ø-Ø	A	PL	H4ØØ-Ø-Ø	F	H400-00008
	SHEET 1 OF 1	DIST. G				

DEC FORM DEC 16 (325) 1031 N870
DRA 110

NOTES:

1. FOR CIRCUIT SCHEMATIC REFER TO DWG D-UA-H4ØØ-Ø-Ø
2. ETCHED BOARD #5009821 MUST BE U.L. APPROVED. MANUFACTURER'S U.L. NUMBER LOCATION IS SHOWN ON AH DRAWING.





QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		ASSY/DRILLING HOLE LAYOUT	D-AH-5409824-05	REF
3		FASTON TAB	9008219	6
6		P.C. SOCKETS FEMALE	1209456	5
1	J1	MATE-N-LOCK 6-PIN	1209350-06	4
1	C1	CAP INPUT .02 MF	1010767	3
3		EYELET # GS4-5	9009003	2
		ETCHED CIRCUIT BD	5009821	1
		MODULE ECO HISTORY	B-MH-5409824-0-6	REF
		X-Y COORDINATE HOLE LOCATION	K-CO-5409824-0-0	REF

FIRST USED ON OPTION/MODEL: H4ØØ A

PARTS LIST

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES.
TOLERANCES

DECIMALS	ANGLES
.XXX ± .005 .XX ± .02 .X ± .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

		DATE
DRN.	T. Quillen	12-8-71
CHKD.	D. Fortune	4-6-72
ENG.	David De Mi...	5-4-72
PROJ. ENG.	R...	5-6-72
PROD.	R.H. Peterson	11/7/72

NEXT HIGHER ASSY.: C-UA-H4ØØ-Ø-Ø

SCALE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: POWER CONTROL BOARD (115V)

SIZE	CODE	NUMBER	REV.
C	IA	5409824-0-0	C

DIST

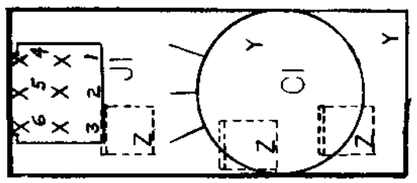
REVISIONS			
CHK.	CHANGE NO.	REV.	
	5409824-00001	A	01 Block 2-1-72 R.WOLF
	5409824-00002	B	R. BURTON 5/22/72
	5409824-00003	C	R. WOLF 12-3-73

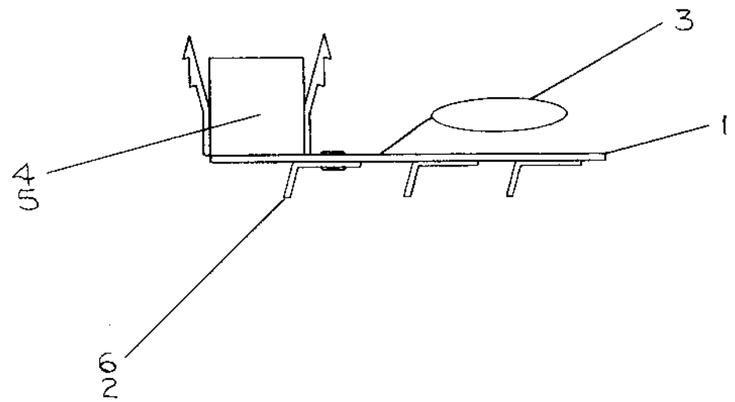
DEC FORM NO.

REV. C
NUMBER 5409824-0-0
SIZE C CODE IA

NOTES:

1. FOR CIRCUIT SCHEMATIC REFER TO DWG D-UA-H400-0-0.
2. ETCHED BOARD # 5009822 MUST BE U.L. APPROVED. MANUFACTURER'S U.L. NUMBER LOCATION IS SHOWN ON AH DRAWING.





QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		ASSY/DRILLING HOLE LAYOUT	D-AH-5409825-0-5	REF
3		FASTON TAB	9008219	6
6		P.C. SOCKETS MALE	1209456	5
1	J1	6-PIN MATE-N-LOCK	1209350-06	4
1	C1	CAP. INPUT .0047 μF	1014912	3
3		EYELET #G54-5	9009000	2
1		ETCHED CIRCUIT BOARD	5009822	1
		MODULE E.C.O HISTORY	B-MH-5409825-0-6	REF
		X-Y COORDINATE HOLE LOCATION	K-C0-5409825-0-4	REF

FIRST USED ON OPTION/MODEL: H400 B

PARTS LIST

REVISIONS				
CHK	CHANGE NO.	REV.		
	5409825-00001	A	R. WOLF	8-2-72
	5409825-00002	B	R WOLF	10-26-72
	5409825-00003	C	A BARON	5-2-73
	5409825-00004	D	A. BARON	8 DEC 73
	5409825-00005	E	A. BARON	5-13-74

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
XXX = .005 XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —/—

FINISH —/—

DRN. T. Guilbin	DATE 12-9-71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. J. Stevens	DATE 1-4-72	
ENG.	DATE 1-4-72	
PROJ. ENG.	DATE 1-7-72	
PROD. R. Peterson	DATE 1/17/73	

NEXT HIGHER ASSY. C-UA-H400-0-0

SCALE —/—

SHEET 1 OF 1

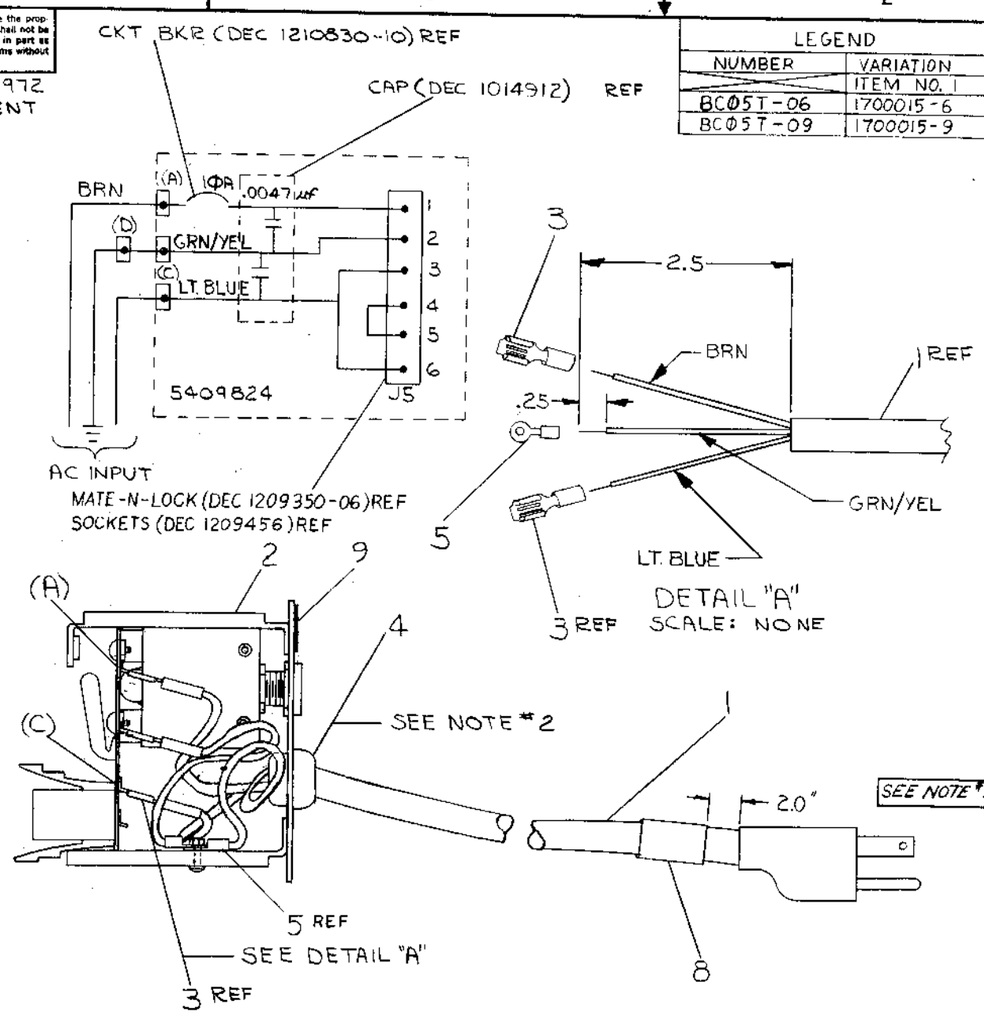
TITLE: POWER CONTROL BOARD (230V)

SIZE	CODE	NUMBER	REV.
C	IA	5409825-0-0	E

DIST.

SEE CODE IDENT NUMBER C IA 5409825-0-0 REV. E

DEC FORM NO. DRC 100-A



LEGEND	
NUMBER	VARIATION
	ITEM NO. 1
BCØ5T-06	1700015-6
BCØ5T-09	1700015-9

NOTES:
1. CONNECT ITEM#1 (POWER CORD) AND ITEM#2 (A.C. INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO#2° STRAIN RELIEF PLIERS.
3. APPLY ID LABEL (ITEM#10) TO BACK COVER.

ITEM NO.	QTY.	DESCRIPTION	PART NO.
10	1	LABEL, POWER SUPPLY (SEE NOTE #3)	9009255-01
9	1	U DECAL	3612063
8	1	AC LINE CORD WARNING LABEL	3611448
~~7~~	~~1~~	~~CABLE LABEL~~	~~9009532~~
~~6~~	~~2~~	~~TIE WRAP (SM)~~	~~9007031~~
5	1	RING TERMINAL RED	9007929-0
4	1	STRAIN RELIEF GN3-4	9006492-2
3	2	FAST ON RED	9007970
2	1	A.C. INPUT BOX H4ØØC	H4ØØ-C
1	1	POWER CORD 120V	SEE LEGEND

PARTS LIST

FIRST USED ON OPTION/MODEL: 11/35

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1
ANGLES: ±Ø° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. K. Bruno DATE 11-21-72
CHKD. DATE 12-5-72
ENG. C.K. Blasi DATE 1-16-73
PROJ. ENG. C.K. Blasi DATE 1-16-73
PROD. DATE 2-21-73
NEXT HIGHER ASSY. E-AD-BAII-D-Ø
SCALE NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

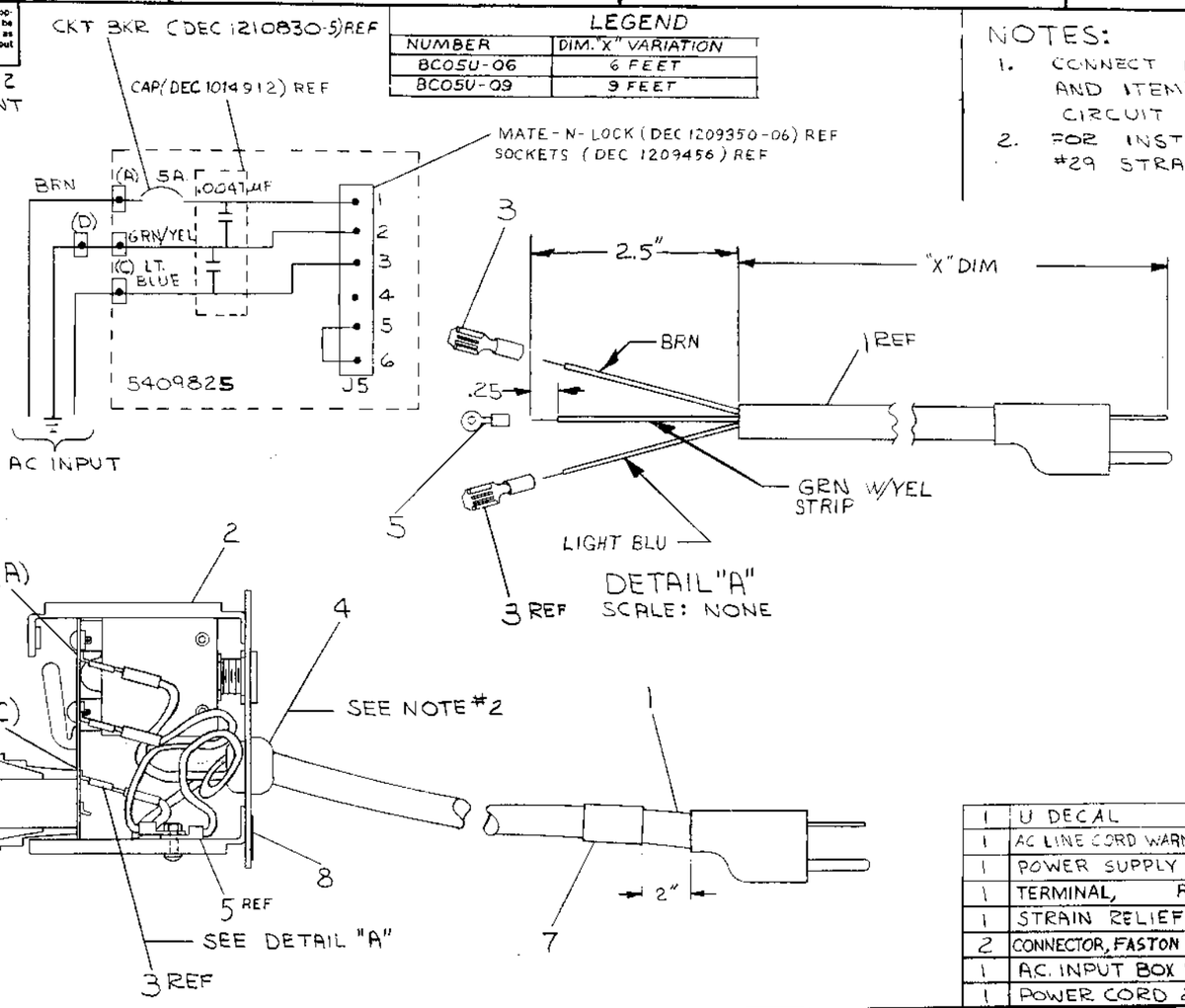
TITLE
LINE SET
115V A.C. 10 AMP.

SIZE	CODE	NUMBER	REV.
C	UA	BCØ5T-Ø-Ø	E

DIST.

REVISIONS	CHANGE NO.	REV.
CHK		
GM	BCØ5T-00001	A
C. BLASI 4-9-73		
C. BLASI 6-11-73	BCØ5T-00002	B
C. BLASI 6-15-73	BCØ5T-00003	C
R. KENNEDY 30 DEC 77	BCØ5T-00004	D
A. BARON 1-6-78	BCØ5T-00005	E
A. BARON 4-4-78		

DEC FORM NO. DRC 100-A



SHOWN WITHOUT COVER

LEGEND	
NUMBER	DIM. "X" VARIATION
BC05U-06	6 FEET
BC05U-09	9 FEET

NOTES:
1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS.

ITEM NO.	QTY.	DESCRIPTION	PART NO.
8	1	U DECAL	3612063
7	1	AC LINE CORD WARNING LABEL	3611498
6	1	POWER SUPPLY LABEL	9009255-01
5	1	TERMINAL, RING, RED	9007929-0
4	1	STRAIN RELIEF 6N3-4	9008492-2
3	2	CONNECTOR, FASTON, RED	9007970
2	1	AC INPUT BOX H4ØØD	H4ØØ-D
1	1	POWER CORD 240V	1700043

PARTS LIST

FIRST USED ON OPTION/MODEL: 11/35

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	±0° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. K. Davis	DATE 11-21-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 12-1-72	
ENG. K.B. Blasi	DATE 1-16-73	
PROJ. ENG. K.B. Blasi	DATE 1-16-73	
PROD.	DATE 2-21-73	

NEXT HIGHER ASSY. E-AD-BAII-D-Ø

SCALE NONE

SHEET 1 OF 1

TITLE: LINE SET 230V AC. 5 AMP

SIZE C | CODE UA | NUMBER BCØ5U-Ø-Ø | REV. D

DIST.

REV. F | NUMBER BCØ5U-Ø-Ø | SIZE C | CODE UA | B

REVISIONS	CHK	CHANGE NO.	REV.
		BC05U-00001	A
		BCØ5U-00002	B
		BC05U-00003	C
		BC05U-00004	D

C. BLASI 4-6-72
C. BLASI 4-13-72
Ernie A. 6-11-73
C. BLASI 6-15-73
R. KENNEDY 2-26-73
A. BARON 6 JAN 78

BRUNING AP 107 15968

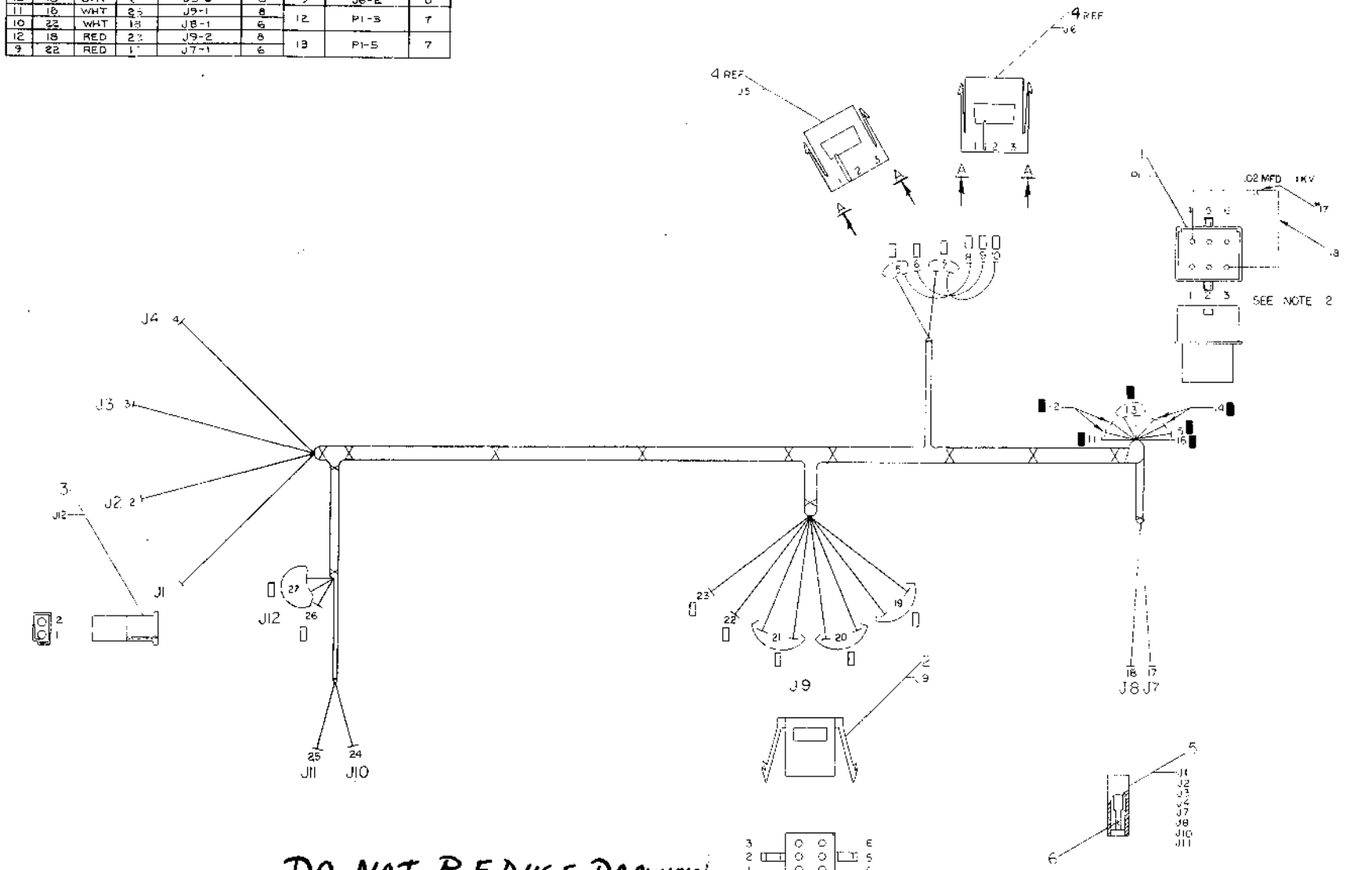
DEC FORM NO. DRC 100-A

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM.	TO POINT	TO CONNECTION	TO TERM.
9	22	RED	24	J10-1	6	19	J9-3	8
12	18	RED	11	P1-6	7			
9	22	RED	25	J11-1	6	27	J12-2	8
12	18	RED	20	J9-4	8	16	P1-4	7
16	18	RED	26	J12-1	8	1	J1-1	6
12	18	RED	2	J2-1	6	15	P1-1	7
13	18	VIO	3	J3-1	6	5	J5-1	8
13	18	VIO	5	J6-1	8			
14	18	BLK	4	J4-1	6	21	J9-5	8
14	18	BLK	14	P1-2	7	7	J5-3	8
14	18	BLK	10	J6-3	8	9	J6-2	8
15	18	GRY	6	J5-2	8	12	P1-3	7
11	18	WHT	23	J9-1	8			
10	22	WHT	18	J8-1	6	13	P1-5	7
12	18	RED	21	J9-2	8			
9	22	RED	1	J7-1	6			

NOTES:
1. USE TIE WRAPS (ITEM #16) APPROXIMATELY EVERY THREE INCHES WHEN NECESSARY AND AT EVERY BREAKOUT POINT.
2. CAPACITOR SHOULD BE CRIMPED TOGETHER WITH PART 12 E 16. LEADS SHOULD BE INSULATED AND NOT LONGER THAN 1 INCH.

VIEW A-A
SCALE: NONE



ITEM	QTY	DESCRIPTION	PART NO.
A/R		TEFLON TUBING	9107276-01
17	1	CAP .02 μF 1000V 20%	10-1076T
16	A/R	TIE WRAP, SSTM, PANDUIT	9007031
15	A/R	WIRE, #18 AWG GRY	9107360-88
14	A/R	WIRE, #18 AWG BLK	9107360-00
13	A/R	WIRE, #18 AWG VIO	9107360-77
12	A/R	WIRE, #18 AWG RED	9107360-22
11	A/R	WIRE, #18 AWG WHT	9107360-99
10	A/R	WIRE, #22 AWG WHT	9107350-99
9	A/R	WIRE, #22 AWG RED	9107350-22
8	13	SOCKET, TERM. CONTACT	12093379-01
7	6	PIN, TERM. CONTACT	12093378-01
6	8	MINI-FASTABS #60291-1	12108220-2
5	6	HOUSING, 1-480417-0	12108201-1
4	2	CONN, MATE-N-LOK, 3 PIN	12093350-03
3	1	CONN, MATE-N-LOK, 2 PIN	12108212-2
2	1	CONN, MATE-N-LOK, 6 PIN	12093350-06
1	1	CONN, MATE-N-LOK, 9 PIN	12093351-09

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-11/05

UNLESS OTHERWISE SPECIFIED DIMENSION IS INCHES. TOLERANCES: DECIMALS XXX ± .005, XX ± .02, X ± .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL: SEE PARTS LIST

FINISH:

DRAWN: Carol Cyr 6-6-72
CHECKED: [illegible]
ENG: [illegible]
MFG: [illegible]
NEXT HIGHER ASSY: D-UA-1105-0-0

SCALE: 1/2
SHEET 1 OF 1

DIGITAL EQUIPMENT CORPORATION

TITLE: AC INPUT HARNESS (PDP11/05)

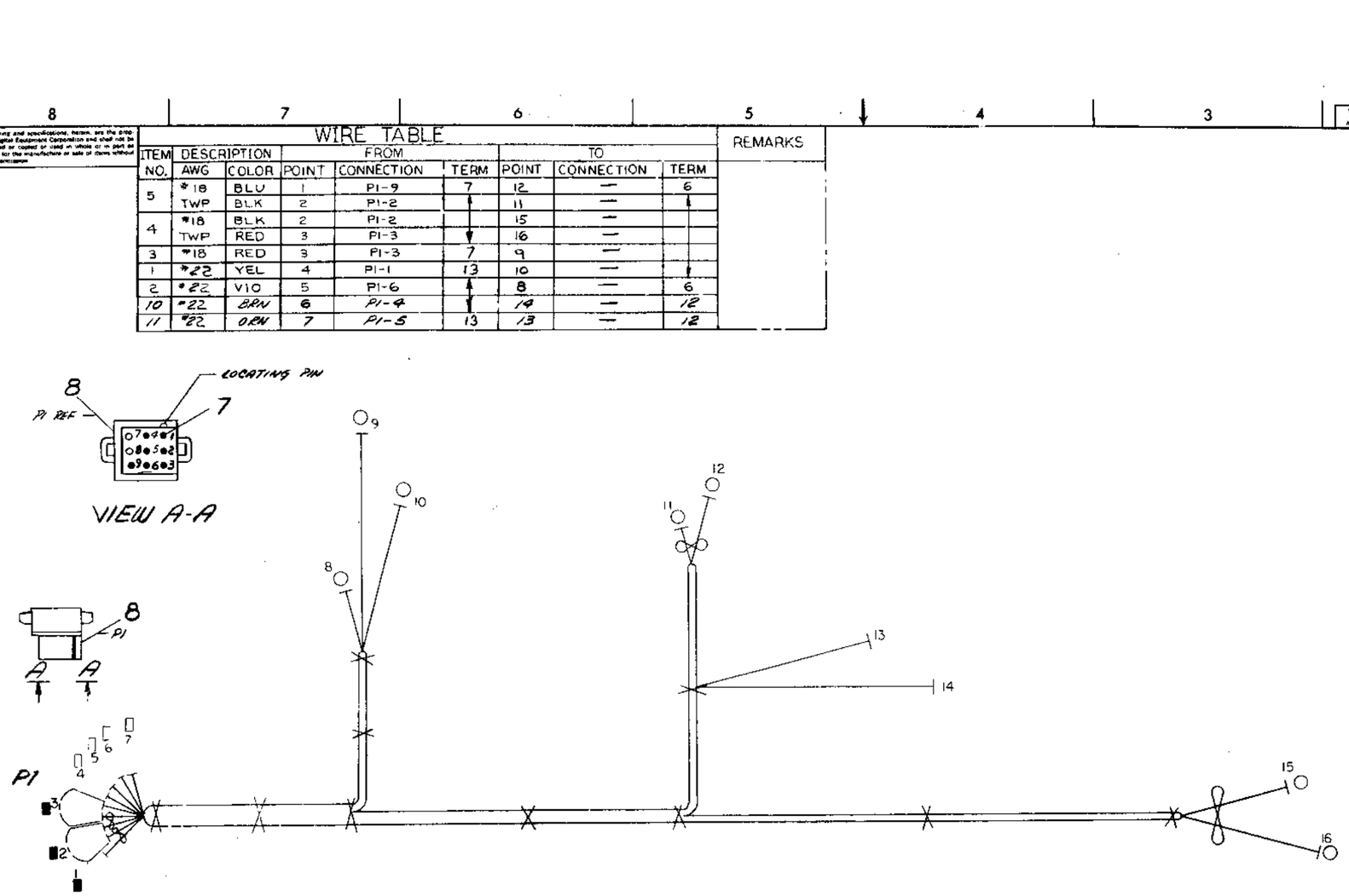
SIZE B | CODE UA | NUMBER 7008713-0-0 | REV. D

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO TERM	REMARKS
5	*18 TWP	BLU BLK	1 2	P1-9 P1-2	7 ↑	12 11	— —	6 ↑	
4	*18 TWP	BLK RED	2 3	P1-2 P1-3	↓ ↓	15 16	— —	↓ ↓	
3	*18	RED	3	P1-3	7	9	—	↓	
1	*22	YEL	4	P1-1	13	10	—	↓	
2	*22	VIO	5	P1-6	↑	8	—	6	
10	*22	BRN	6	P1-4	↑	14	—	12	
11	*22	ORN	7	P1-5	13	13	—	12	

NOTES:

1. USE CABLE TIES (X) ITEM *9 AS SHOWN AND AT BREAK OUT POINTS WHERE NECESSARY.



DO NOT REDUCE

SCALE

0 IN. 6 IN. 12 IN.

	QTY.	DESCRIPTION	PART NO.	ITEM NO.
□	4	PIN MATE-N-LOCK MALE	1209378-03	13
	2	TERMINAL AMP *85552-3	9007655	12
	A/R	WIRE *22 AWG STRD (GRN)	9107350-33	11
	A/R	WIRE *22 AWG STRD (BRN)	9107350-11	10
X	A/R	TIE, CABLE PANDUIT SST15M	9007880	9
P1	1	CONN., MATE-N-LOCK 9 PIN MALE	1209351-09	8
■	3	PIN, MATE-N-LOCK MALE	1209378-00	7
○	7	TERM., AMP TAB RED	9007917	6
	A/R	WIRE, *18 AWG STRD TWP BLU/BLK	9107430-06	5
	A/R	WIRE, *18 AWG STRD TWP RED/BLK	9107430-02	4
	A/R	WIRE, *18 AWG STRD RED	9107360-22	3
	A/R	WIRE, *22 AWG STRD VIO	9107350-77	2
	A/R	WIRE, *22 AWG STRD YEL	9107350-44	1

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP 1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX ± .005	±0° 30'
.XX ± .02	
.X ± .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL: SEE PARTS LIST

FINISH: —

	NAME	DATE
DRN	D. Yoshnau	2-28-72
CHK'D	[illegible]	3-7-72
ENG.	[illegible]	5-3-72
PROJ ENG.	[illegible]	5-3-72
PROD.	[illegible]	5-4-72

NEXT HIGHER ASSY: D-UA-1105-Ø-Ø

SCALE 1/1

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: HARNESS DC (PDP 1105)

SIZE	CODE	NUMBER	REV.
D	IA	7008856-0-0	A

DIST.

REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	7008856 (0001)	A	[illegible]

ARMSTRONG

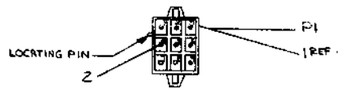
DEC FORM NO. DRD 100-A

SIZE/SCORE D IA 7008856-0-0 REV. A

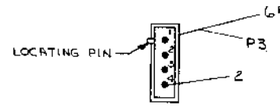
WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	ITEM	TO POINT	TO CONN	ITEM	LENGTH	SIGNAL NAME
1	14	BLU	1	P1-8		2	TB1-14	SOLDER	21.50	-15V
16	16	VIO	6	P1-6		31	TB1-8		25.00	DCLO
21	12	BLK	3	P1-3		25	TB1-7		25.50	GND (1)
18	18	YEL	7	P1-1		21	TB1-13		26.25	RCLO
13	18	RED	5	P1-5		22	TB1-12		27.25	+5V (1)
20	14	GRY	4	P1-4		23	TB1-11		27.00	+15V
15	14	ORN	6	P1-6		24	TB1-10		26.75	LTC
30	14	RED	8	P2-2		17	TB1-17		42.12	+5V
30	14	RED	11	P2-3		16	TB1-16		42.50	
14	14	BLK	9	P2-3		19	TB1-18		43.25	GND2
14	14	BLK	10	P2-4		18	TB1-12	SOLDER	42.25	
23	20 TWP	BLK	21	P3		12	P3-4	2	31.50	
		WHT	20	P4		13	P3-3	2	31.50	
9	18	RED	14	P3-2		33	P3	3	50.25	
	TWP	BLU	15	P3-1		32	P4	3	50.25	
17	14	BLU	33	P2-8		34	J1-1	26	6.88	
17	14	BLU	35	P2-7		37	J1-2	26	6.00	
27	18	BLK	30	P5		28	P6		2.50	
		BLK	31	P4		29				
27	18	BLK	30	P5		29	P7		9.00	
		BLK	31	P4						

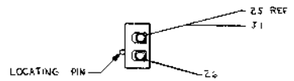
SEE NOTE #2



VIEW A-A
SCALE: NONE
(REAR VIEW)

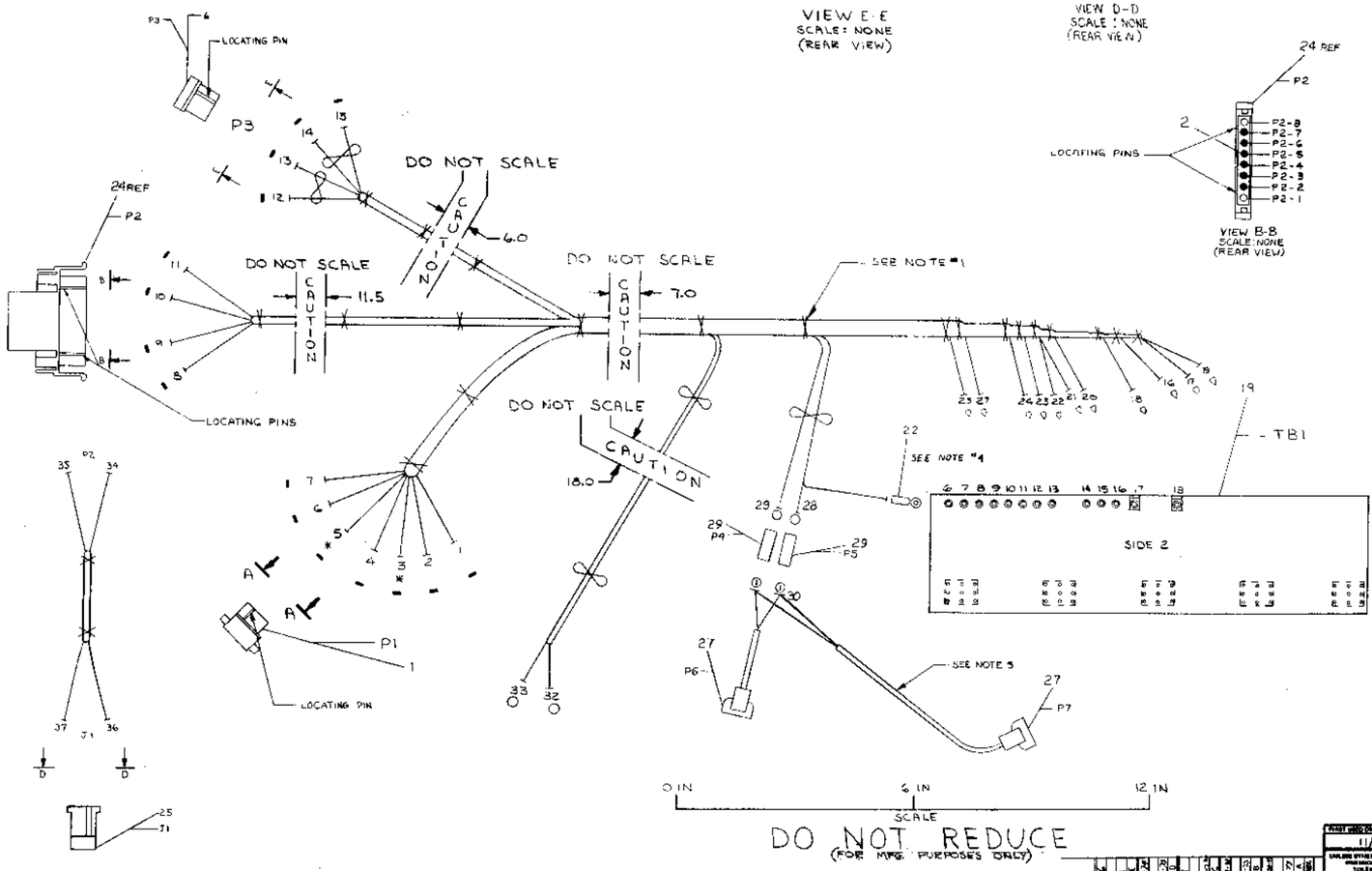


VIEW E-E
SCALE: NONE
(REAR VIEW)



VIEW D-D
SCALE: NONE
(REAR VIEW)

VIEW B-B
SCALE: NONE
(REAR VIEW)



DO NOT REDUCE
(FOR MFG. PURPOSES ONLY)

NOTES:

1. USE TIE WRAPS (X)(ITEM #7 OR 8) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY, AND AT EVERY BREAKOUT POINT.
2. ITEM #21 (12 GA BLK) AND ITEM #16 (16GA VIO) ARE SEPERATE WIRES BUT A TWISTED PAIR SHALL BE MADE OF THEM BEFORE PLACING THEM IN THE HARNESS.
3. SHIELDED GND FOR WIRE TO FANS TO BE CONNECTED ON P4, P5 END ONLY.
4. SOLDER ITEM 22 TO SHIELD WIRE. MAKE SHIELD WIRE AT LEAST 2" LONG.
5. ITEMS 3, 27, 28 AND 29 CAN BE ORDERED AS A SEPERATE SUB-ASSEMBLY ITEM. DRAWING AND PART NUMBER C-1A-TOK0496-0-0.

#6 SOLDER AFTER TERMINATE.

ITEM	QTY	DESCRIPTION	PART NO	REV
		PARTS LIST		
31	4	MATE-N-LOCK PIN	1209378-08	
30	A/R	WIRE #14 AWG STRD, RED	9107370-22	
29	2	TERMINAL, AUXILIOR, DOUBLE WALL PIC	9209110	
28	2	CONN, SOLDERLESS #50806	9007926-0	
27	2	PLUG-CORD ASSEMBLY	1210283	
26	2	SOCKET TERMINAL CONTACT, FEMALE	1209379-8-0	
25	1	CONN, MATE-N-LOCK 2 PIN	1318031-8E	
24	1	CONN, MATE-N-LOCK 8 PIN	1318348-21	
23	A/R	WIRE #20 SHIELDED TWP BLK/WHT	9107701	
22	1	TERMINAL, SHAKEPROOF	9008150	
21	A/R	WIRE #12 STRD, BLK	9107380-00	
C 20	A/R	WIRE #14 STRD, GRY	9107370-88	
19	1	POWER DIST. BOARD	D058K071-0-01	
18	A/R	WIRE #18 STRD, YEL	9107350-44	
17	A/R	WIRE #16 STRD, BLU	9107310-06	
16	A/R	WIRE #18 STRD VIO	9107360-77	
15	A/R	WIRE #14 STRD, ORN	9107370-33	
14	A/R	WIRE #14 STRD, BLK	9107370-00	
13	A/R	WIRE #12 STRD, RED	9107380-22	
12				
11				
10	A/R	WIRE #18 STRD TWP, BLK/BLU	9107430-06	
9				
8	X 7	TIE WRAP, PANDUIT #SST-2M	9007032	
7	X 20	TIE WRAP, PANDUIT #SST-M	9007031	
6	1	CONN, MATE-N-LOCK 4 PIN	1209351-04	
5				
4				
3	4	CONN, SOLDERLESS #50802	9007970-00	
2	13	PIN, CONTACT (MALE)	1209378-00	
1	SYMB 1	CONN, MATE-N-LOCK 9 PIN	1209381-09	

FIRST WIRED ON OPTION MODEL			
11/35			
UNLESS OTHERWISE SPECIFIED FIND BREAK IN NOTES TOLERANCES			
DECIMALS	ANGLES		
XX = .03	1/4°		
.X = .1			
REMOVE BURRS AND SHARP EDGES			
MATERIAL			
SEE PARTS LIST			

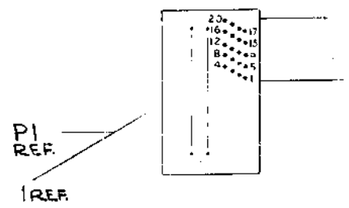
DIGITAL EQUIPMENT CORPORATION

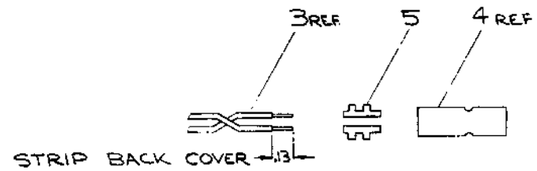
TITLE: PDP 11/35 POWER TO DISTRIBUTION BOARD HARNESS

SIZE: D | NUMBER: 70009208-0-0 | REV: E

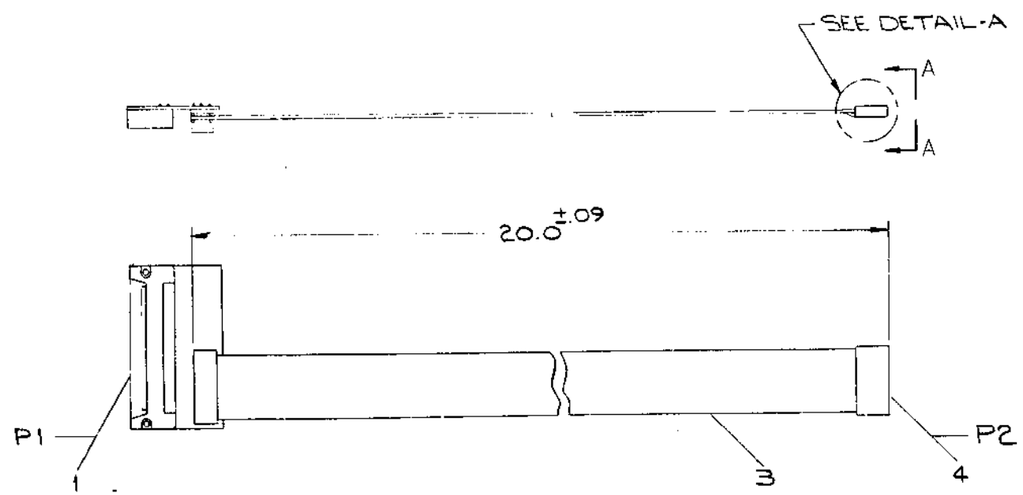
SCALE: 1/1 | SHEET: 1 OF 1

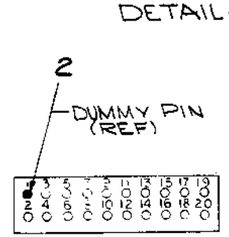
NOTES:
1. CONNECTORS P1 AND P2 ARE TO BE WIRED POINT TO POINT (P1-1 TO P2-1 P1-2 TO P2-2 ECT.)





DETAIL-A





VIEW A-A
(FRONT VIEW)

ITEM NO	DESCRIPTION	PART NO.	QTY.
5	MINI-TERMINAL #47783 BERG	12100890	19
4	RECEPTACLE 20 PIN #65043-027 BERG	12109180-27	1
3	CABLE SCOTCHFLEX #3350 3M	9107747	A/R
2	DUMMY PIN #47000 BERG	9009/80	1
1	DC DISTRIBUTION MODULE	5409949-00	1

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL: SEE PARTS LIST
FINISH:

DRN. [illegible] DATE 2-24-72
CHK. [illegible] DATE 3-1-72
ENG. [illegible] DATE 3-24-72
PROJECT [illegible] DATE 3-24-72
PROOF [illegible] DATE 3-24-72
NEXT HIGHER ASSY: D-UA-1105-0-0
SCALE: NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION maynard massachusetts

TITLE: HEADER CABLE ASSY

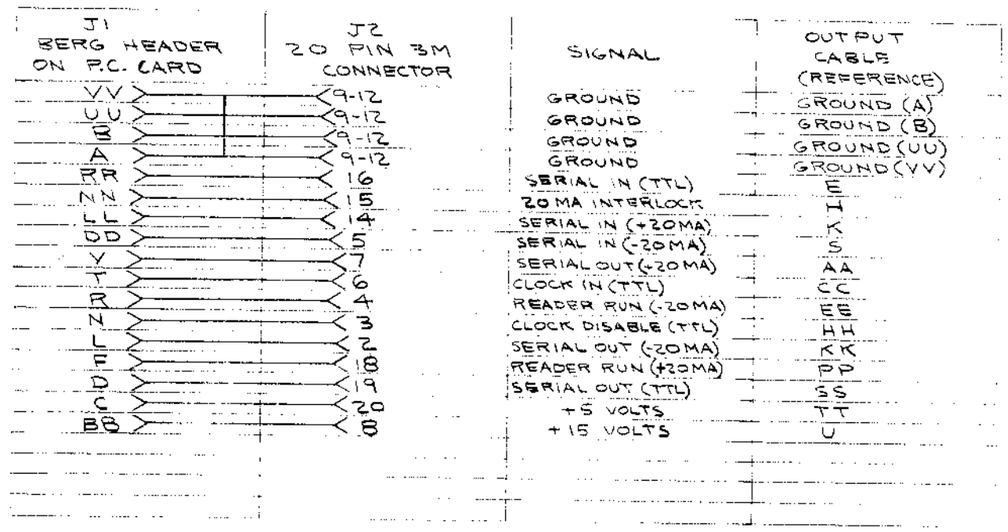
SIZE D | CODE IA | NUMBER 7008820-0-0 | REV. A
DIST.

REVISIONS			
CHANGE NO		CHK	REV
7CC8820-CC001			A

DE MORANVILLE

DEC FORM NO DRD 100-A

7008820-0-0 SIZE D IA REV A



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
XXX = .005 .XX = .02 .X = 1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

DRN.	DATE	4-6-72
CHK'D. C. Teschner	DATE	4-6-72
ENG.	DATE	
PROJ. ENG.	DATE	4-13-72
PROD.	DATE	
NEXT HIGHER ASSY.	D-IA-5409949-Ø-Ø	
SCALE		
SHEET 1 OF 1		

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE

CIRCUIT SCHEMATIC

SIZE	CODE	NUMBER	REV.
C	CS	5409949-0-1	A

DIST.

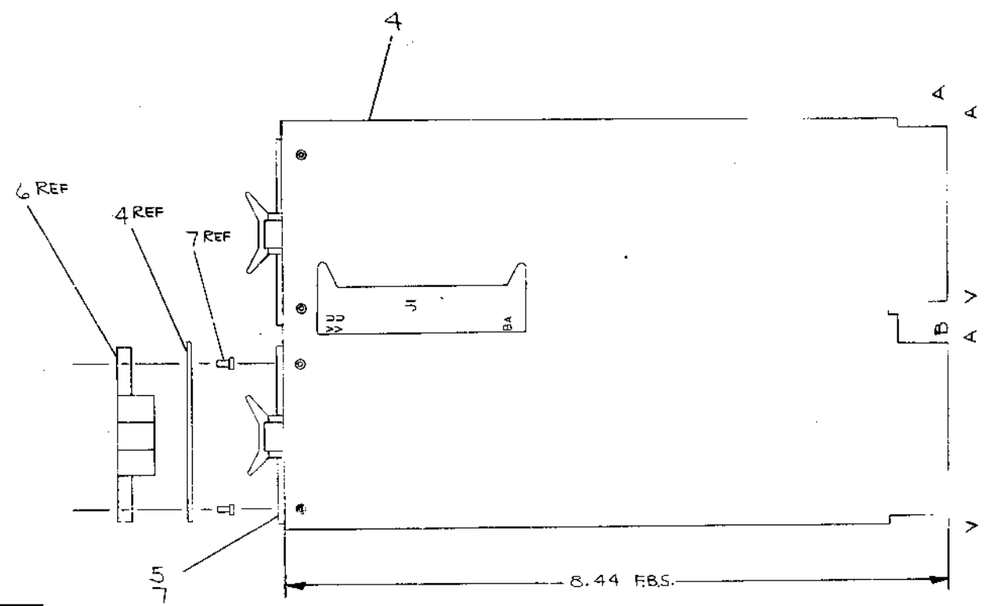
SIZE	CODE	NUMBER	REV.
C	CS	5409949-0-1	

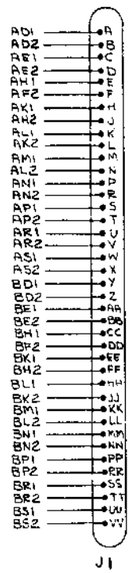
REVISIONS	CHANGE NO.	REV.
		CHK

BRUNING 40-107 15968

DEC FORM NO. (IRC 100-A)

NOTES:





REF		X-Y CO-ORDINATE HOLE LOCATION	K-CO-M9970-0-4	1
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M9970-0-5	2
REF		MODULE ECO HISTORY	B-MH-M9970-0-6	3
1		ETCHED CIRCUIT BOARD	3010347	4
1		BERG CONN, 40 PIN	1209941	5
2		HANDLE, FLIP-CHIP-MAGNETA	9008337-6	6
4		EYELET, HANDLE	9006732	7

IC TYPE	GND	+ 5V

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

IC PIN LOCATIONS

DEC FORM NO. DRD-139A

BRUNING 40-522 15699

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL: //

ETCH BOARD REV A

CHK	CHANGE NO.	REV
	REVISIONS	

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

		DATE
DRN.	K. Hanks	11-30-72
CHKD	L. Maddock	12-1-72
ENGR		5-19-73
PROJ ENGR		6-19-73
PROD		6-19-73

NEXT HIGHER ASSY: //

SCALE: NONE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: BERG BACKPLANE CONNECTOR

SIZE	CODE	NUMBER	REV.
D	CS	M9970-0-1	*

DIST.

DWG NO. M9970-0-1 REV *

SHT 1 OF 1

WIRE TABLE

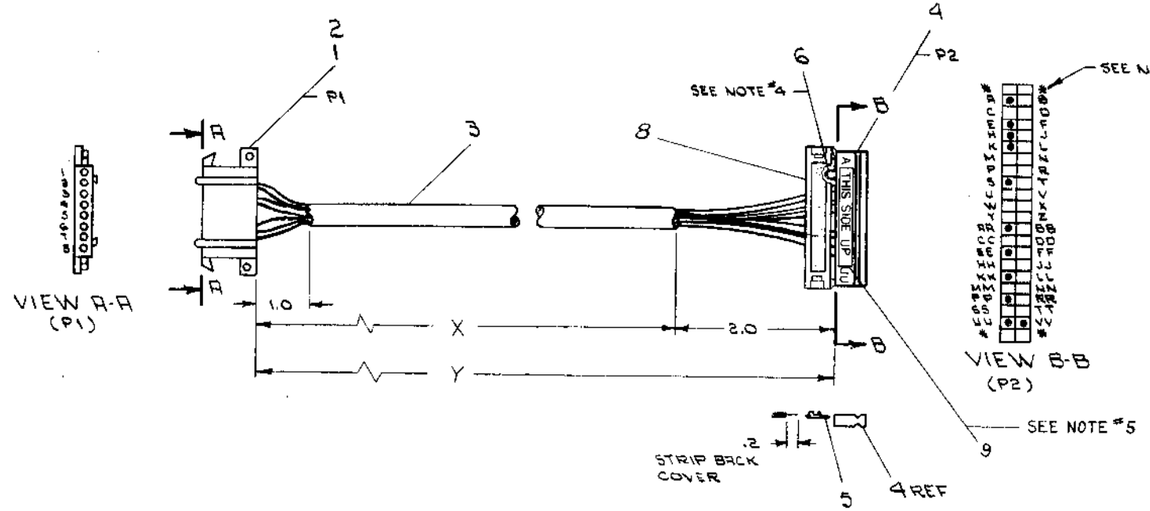
ITEM NO.	DESCRIPTION AWG	COLOR	PAIR NO.	FROM CONNECTION	FROM WITH	TO CONNECTION	TO WITH
3	22	BLK	1	P1-2	2	P2-KK	5
3		RED		P1-3	2	P2-S	
3,7		SHIELD		SEE NOTE #2	—	P2-A(NOTE #3)	
3		BLK	2	P1-4	2	P2-EE	
3		WHT		P1-5	2	P2-RR	
3,7		SHIELD		SEE NOTE #2	—	P2-UU(NOTE #3)	
3		BLK	3	P1-6	2	P2-PP	
3		GRN		P1-7	2	P2-K	
3,7		SHIELD		SEE NOTE #2	—	P2-VV(NOTE #3)	
6	22	BLK	—	P2-E	5	P2-H	5

LEGEND

VARIATION	LENGTH X	LENGTH Y
7008360-0	25IN±1.0	27IN±1.0
7008360-1	46IN±1.0	48IN±1.0
7008360-9	9FT±2IN	9FT2IN±2IN

NOTES:

1. * ASTERISKS INDICATE CAVITIES NOT USED OR DESIGNATED BY LETTERS.
2. DRAIN WIRES TO BE CUT BACK TO OUTER INSULATION ON P1 END OF CABLE ONLY. SHIELDS TO BE CUT BACK TO OUTER INSULATION ON BOTH ENDS OF CABLES.
3. DRAIN WIRES ON P2 END OF CABLE TO BE EACH ENCLOSED WITH ITEM#7 (TUBING) FROM END OF CABLE JACKET TO POINT WHERE THEY ENTER P2 CONNECTOR.
4. ITEM#3(WIRE) TO BE APPROXIMATELY ONE(1) INCH LONG.
5. PLACE ITEM#9("THIS SIDE UP" STICKER) ON LETTERED SIDE OF ITEM#4 (BERG HOUSING) AS SHOWN.



ITEM NO.	QTY.	DESCRIPTION	PART NO.
9	1	LABEL, THIS SIDE UP	3611567
8	1	STRAIN RELIEF	1211166
7	A/R	TUB. #18 TEF. THINWALL WHT	9107278-11
6	A/R	WIRE, #22 AWG STR'D TEF BLK	8107350-00
5	11	SOCKET, CRIMP# 4-7216	1210089-07
4	1	HOUSING, BERG #.5043-015	1210918-15
3	A/R	CABLE, BELDEN#8777-3PR SHLD	9107723-0
2	6	CONTACT MATE-N-LOCK(FEMALE)	1209379-03
1	1	CONN. MATE-N-LOCK(FEMALE)	1209340-00

PARTS LIST

REVISIONS			
CHK	CHANGE NO	REV	
K. SEE-0006		A	
P.LBE-0006		E	
E. CLARK			
P.M 7008360-00001		C	
E. ALLEN 10-23-73			
B. REGAN			
E.A 7008360-00002		D	
REGAN			
S.E 7008360-00003		F	
BCOSMI 3/1/74			
M.E. LEWANDOWSKI			
P.M 7008360-00004		H	
J. MCNAMARA			

FIRST USED ON OPTION/MODEL: PDP-8E

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
ANGLES ± 1°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL: SEE PARTS LIST
FINISH:

DRN: [redacted] DATE 12/28/71
ENG: [redacted] DATE 4-6-71
PROJ. ENG: [redacted] DATE 4-1-74
PROD: [redacted] DATE 4/9/74
NEXT HIGHER ASSY: A ML-KL8-E-0
SCALE: NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CABLE ASSEMBLY (KL8E)

SIZE D | CODE IA | NUMBER 7008360-0-0 | REV H
DIST.

W13C PARTS REFERENCE

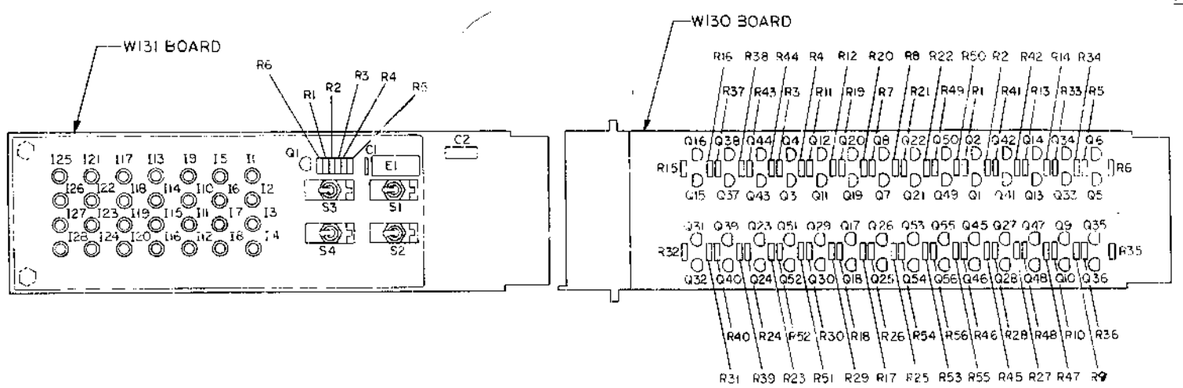
ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1	R1,R3,R5,R7,R9,R11,R13,R15,R17,R19,R21,R23, R25,R27,R29,R31,R33,R35,R37,R39,R41,R43, R45,R47,R49,R51,R53,R55	15K 1/4W 5% FES.	1300496	28
2	R2,R4,R6,R8,R10,R12,R14,R16,R18,R20,R22, R24,R26,R28,R30,R32,R34,R36,R38,R40, R42,R44,R46,R48,R50,R52,R54,R56	470 1/4W 5% RES.	1300316	28
3	Q1-Q56	DEC 3009S TRANSISTOR	1503100	56
4	P1	HE07 BLOCK,CONNECTOR	1209123	1

W13I PARTS REFERENCE

ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1	E1	DEC 7480N LC	1505575	1
2	C1	.01 MFD,100V,20% DC CAP.	1031610	1
3	C2	6.8 MFD, 35V, 20% ST. CAP.	1030267	1
4	R1,R2,R3,R4,R5	3K 1/4W 5% RES.	1300432	5
5	R6	330 1/4W 5% RES.	1300295	1
6	Q1	DEC 3009B TRANSISTOR	1503100	1
7	I1-I28	LAMP,HUDSON BLUE #2309G	1209219	28
8	S1-S4	SWITCH,TOGGLE,SPST,6AMP-T2	1201168	4

NOTES:
1. THE KM11 IS A TWO MODULE (W13C, W13I) OPTION TO THE KA11 TO AID MAINTENANCE. THIS PREWIRED OPTION IS INSTALLED BY INSERTING THE W13C MODULE INTO LOCATION D02 AND INSERTING THE W13I MODULE INTO THE W13C. NOTE THAT THE SWITCHES AND LIGHTS FACE TOWARD AND EXTEND BELOW THE CONSOLE. THE BOTTOM COVER MUST BE REMOVED WITH THE CHASSIS EXTERNAL TO THE CABINET.
2. LABELS FOR THE INTERNAL MACHINE STATES LAMPS ARE NOTED ON THE W13I ETCH BOARD. SWITCHES PROVIDE A MANUAL CLOCK AND BUS RESPONSE AND ARE ACTIVE WHEN THE TOGGLE IS TOWARD THE LAMP. NORMAL MACHINE OPERATION REQUIRES THAT ALL SWITCHES BE IN THE OFF POSITION.
3. "M CLK ENABLE" AND "M CLK" PROVIDE A MANUAL CLOCK FOR THE KA11. "M CLK ENABLE" IS ACTIVATED WHILE THE PROCESSOR IS HALTED. EACH TOGGLE OF "M CLK" THEN STEPS THE PROCESSOR THROUGH THE SMALLEST PROCESSOR CLOCK INTERVALS, THE R/W STATES. THE NEXT HIGHEST CLOCK INTERVAL (S CLK) IS PROVIDED BY FOUR TOGGLES (2 COMPLETE SWITCH CYCLES) AND INDICATED BY THE R/W2 LAMP. R/W2 IS THE LAST (OR REST) R/W STATE IN A "S CLK" INTERVAL.NORMAL OPERATION IS RESUMED WHEN "M CLK" AND THEN "M CLK ENABLE" ARE RETURNED TO OFF.
4. "NO TIME OUT" AND "SSYN" PROVIDE A MANUAL BUS RESPONSE TO THE PROCESSOR. IT IS USED WHEN OTHER DEVICES ARE NOT AVAILABLE. "NO TIME OUT" IS ACTIVATED WHILE THE PROCESSOR IS HALTED, TO ELIMINATE AN ERROR TRAP ON MANUAL "SSYN" AT THE APPROPRIATE TIMES IN A BUS TRANSFER "SSYN" IS ACTIVATED AND DEACTIVATED.

COMPONENT PLACEMENT



PN NOMENCLATURE

MODULE	PROCESSOR
A	B

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP11

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ±.005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY √
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN		DATE 4/22/70
CHK'D		DATE 5/1/70
ENG		DATE 5/17/70
PROJ ENG		DATE 5/17/70
PROD		DATE 5/5/70

NEXT HIGHER ASSY: A-ML-KM11-Ø

SCALE: 1/1

SHEET 1 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: MAINTENANCE BOARD (18Z) KM-1

SIZE	CODE	NUMBER	REV.
D	BS	KM11-Ø-MB	

DIST.

REVISIONS		
CHG.	CHANGE NO.	REV.

DEC FORM NO ORD 100

CONNECTOR AT REAR OF MODULE TO EXTEND MAINTENANCE BOARD 2, W131 (KM-3).

+5V	BØ2A2	+5V
~+8V	BØ2B1	+8V
KM-3 M CLK ENABLE L	B2V2	KM-2 M CLK ENABLE L
KM-3 M CLK L	BØ2U1	KM-2 M CLK L
KI3-2 TIME OUT (1) H	BØ2B2	KM-2 TIME OUT (1)H
BUS SSYN L	B2A1	BUS SSYN L
		KM-2 LAMP BSRØ L
		KM-2 LAMP BSR 1 L
		KM-2 LAMP BSR 3 L
		KM-2 LAMP BSR 7 L
GND		GND
		KM-2 LAMP BSR 15 L
		KM-2 LAMP BSR 14 L
		KM-2 LAMP BSR 12 L
		KM-2 LAMP BSR 8 L
		KM-2 LAMP ISR Ø L
		KM-2 LAMP ISR 1 L
		KM-2 LAMP ISR 3 L
		KM-2 LAMP ISR 7 L
		KM-2 LAMP ISR 13 L
		KM-2 LAMP ISR 14 L
		KM-2 LAMP ISR 12 L
		KM-2 LAMP ISR 8 L
		KM-2 LAMP N (1)L
		KM-2 LAMP Z (1)L
		KM-2 LAMP V (1)L
		KM-2 LAMP C (1)L
		KM-2 LAMP T (1)L
		KM-2 LAMP TRAPS L
		KM-2 LAMP B MSYN L
		KM-2 LAMP B SSYN L
		KM-2 LAMP R/W2 L
		KM-2 LAMP TST1 L
		KM-2 LAMP TST2 L
		KM-2 LAMP ESR 2 L

KI-3 BSR Ø H BØ2R2 R29 Q29 Q3Ø R3Ø 47Ø — KI-3 BSR 1 H BØ2E2 R21 Q21 Q22 R22 47Ø — KI-3 BSR 3 H BØ2H1 R1 Q1 Q2 R2 47Ø — KI-3 BSR 7 H BØ2L2 R43 Q43 Q44 R44 47Ø

KI-3 BSR 15 H BØ2N2 R39 Q39 Q4Ø R4Ø 47Ø — KI-3 BSR 14 H BØ2D2 R49 Q49 Q5Ø R5Ø 47Ø — KI-3 BSR 12 H BØ2H2 R19 Q19 Q2Ø R2Ø 47Ø — KI-3 BSR 8 H BØ2J2 R11 Q11 Q12 R12 47Ø

KI-3 ISR Ø H BØ2S1 R55 Q55 Q56 R56 47Ø — KI-3 ISR 1 H BØ2M2 R37 Q37 Q38 R38 47Ø — KI-3 ISR 3 H BØ2F2 R7 Q7 Q8 R8 47Ø — KI-3 ISR 7 H BØ2E1 R33 Q33 Q34 R34 47Ø

KI-3 ISR 15 H BØ2R1 R45 Q45 Q46 R46 47Ø — KI-3 ISR 14 H BØ2K1 R31 Q31 Q32 R32 47Ø — KI-3 ISR 12 H BØ2S2 R17 Q17 Q18 R18 47Ø — KI-2 ISR 8 H BØ2M1 R9 Q9 Q1Ø R1Ø 47Ø

K9-5 N (1)H BØ2P1 R27 Q27 Q28 R28 47Ø — K9-5 Z (1)H BØ2L1 R51 Q51 Q52 R52 47Ø — K9-5 V (1)H BØ2F1 R5 Q5 Q6 R6 47Ø — K9-5 C (1)H BØ2D1 R13 Q13 Q14 R14 47Ø

K9-4 T (1)H BØ2J1 R15 Q15 Q16 R16 47Ø — KI2-3 TRAPS H BØ2C1 R41 Q41 Q42 R42 47Ø — KI3-3 B MSYN H BØ2T2 R35 Q35 Q36 R36 47Ø — KI3-3 B SSYN H BØ2U2 R53 Q53 Q54 R54 47Ø

KI-2 R/W2 H BØ2K2 R3 Q3 Q4 R4 47Ø — KM-2 TST1 H BØ2N1 R47 Q47 Q48 R48 47Ø — KM-2 TST2 H BØ2V1 R25 Q25 Q26 R26 47Ø — KI-3 ISR 2 H BØ2P2 R23 Q23 Q24 R24 47Ø

All resistors 15K unless noted.

REVISIONS	REV	CHK
CHANGE NO.		

FIRST USED ON OPTION/MODEL	PDP11	QTY.	DESCRIPTION / PART NO. / ITEM NO.
			PARTS LIST

UNLESS OTHERWISE SPECIFIED

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

MATERIAL

FINISH

DRN. K. Williams	DATE	12-18-69
CHK'D	DATE	1-2-70
ENG.	DATE	3-6-70
PROJ. ENG.	DATE	3-2-70
PROD.	DATE	5/5/70

NEXT HIGHER ASSY
A-ML-KM11-Ø

SCALE NONE

SHEET 2 OF 3

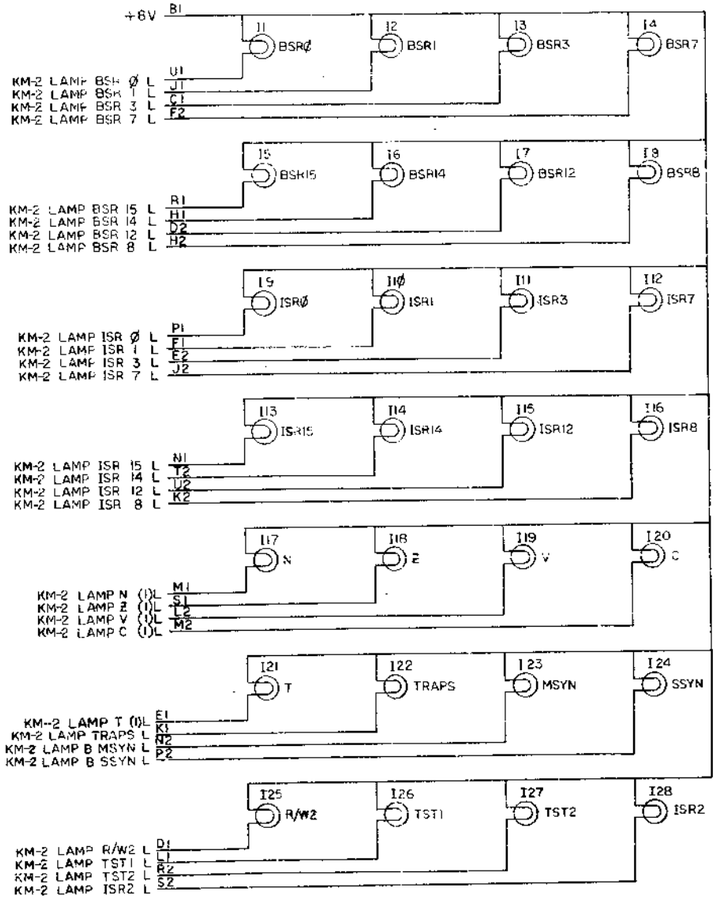
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

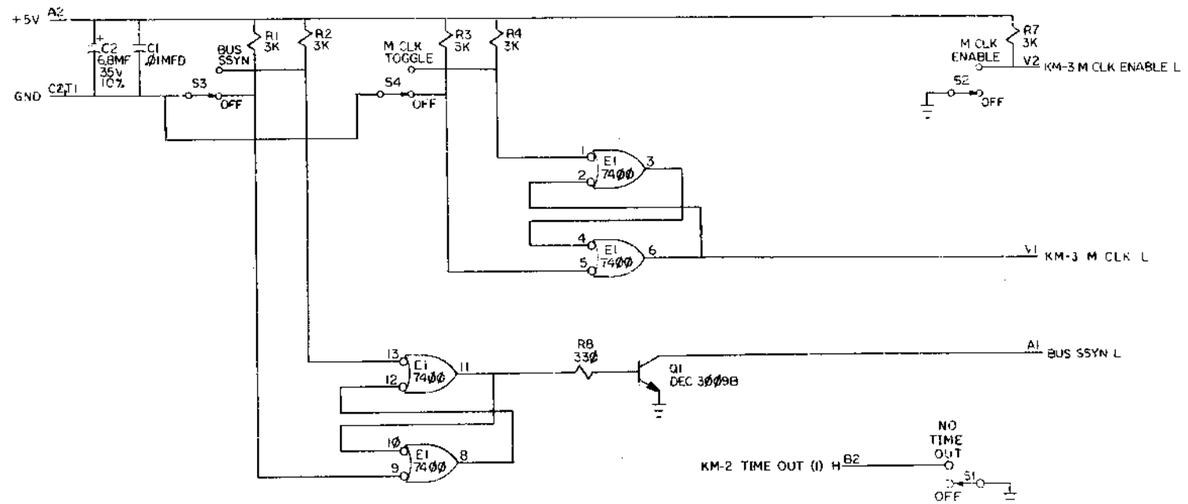
TITLE
MAINTENANCE BOARD (1)
W13Ø KM-2

SIZE	CODE	NUMBER	REV.
D	BS	KM11-Ø-MB	

DIST.

DEC FORM NO





FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO
PDP 11		PARTS LIST		

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

MATERIAL

FINISH

DRN J. Giudice	DATE 12-12-69	digital EQUIPMENT CORPORATION
CHK'D	DATE 4/29/70	
ENG	DATE 3-6-74	TITLE MAINTENANCE BOARD(2)
PROJ ENG	DATE 3-6-74	W131 KM-3
PROD	DATE 5/5/70	

NEXT HIGHER ASSEMBLY A-ML-KM11-Ø

SIZE D | CODE BS | NUMBER KM11-Ø-MB | REV

SCALE NONE

SHEET 3 OF 3

DIST

REVISIONS	CHANGE NO	REV
DRN		
CHK		

DEC FORM 0ND 102A

3 D	7 D	3 B	7 B	11 B	15 B	BUS IR D
2 D	6 D	2 B	6 B	10 B	14 B	BBUSY D
1 D	5 D	1 B	5 B	9 B	13 B	SSYN D
0 D	4 D	0 B	4 B	8 B	12 B	MSYN D

BUS SSYN →	AC LO →
M CLK → PULSE	M CLK → EN

KD11-B KM1

D-DIM WHEN ASSERTED
B-BRIGHT WHEN ASSERTED

5509081-0-9

FIRST USED ON SAT 11/05

11/05

REVISIONS

REV.	CHANGE NO.	CHK

SPEC* 9200100-94 (BLACK)

DRN. A Mattson	DATE 5-11-72
CHK'D. [illegible]	DATE
ENG.	DATE
PROJ. ENG. [illegible]	DATE 5-22-72
PROD. RK Peterson	DATE 5/24/72
NEXT HIGHER ASSY C-IA-5509081-0-0	
SCALE	
SHEET OF	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
MAINT MODULE OVERLAY
(11/05 - KM1)

SIZE	CODE	NUMBER	REV.
A	55	5509081-0-9	

DIST. G

3 D	7 D	03 B	S3 D	ALU M B	AUXC D	MSYN D
2 D	6 D	02 B	S2 D	CIN B	BUT JJ D	SSYN D
1 D	5 D	01 B	S1 D	EALU B	BUT UN D	C1 D
0 D	4 D	00 B	S0 D	SPWR B	CNST D	C0 D

D-DIM WHEN ASSERTED
B-BRIGHT WHEN ASSERTED

BUS SSYN →	AC LO →
M CLK	M CLK
PULSE →	EN →

KD11-B KM2

5509081-0-10

FIRST USED ON 03T/M10D
11/05

REVISIONS	REV.	CHANGE NO.	CHK

SPEC# 9200160-94 (BLACK)

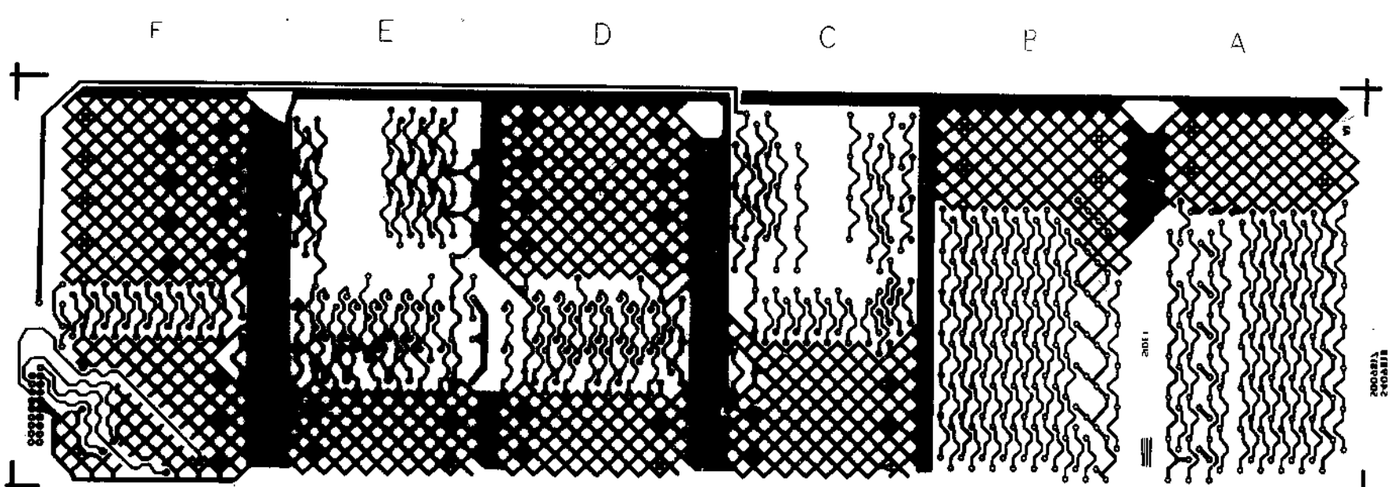
DRN. D. Mattson	DATE
CHK'D. G. Olsen	DATE
ENG.	DATE
PROJ. ENG. A. Teich	DATE 5-23-72
PROD. R.V. Peterson	DATE 5/24/72
NEXT HIGHER ASSY C-IA-5509081-0-0	
SCALE	
SHEET OF	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
MAINT MODULE OVERLAY
(11/05 - KM2)

SIZE	CODE	NUMBER	REV.
A	SS	5509081-0-10	

DIST. G



BLOCK SIDE – SIDE #1

(AS SEEN THROUGH SIDE #2)

REVISIONS		
CHK	CHANGE NO.	REV.
	5409818-00001	D
B. Hale 5-2-72		
B. MINOR 5-2-72		
E. Brown 7-24-72		
	5409818-00002	E
Hgaudet 2/5/73		
G. GRAHAM 2-13-73		
	5409818-00003	F
Hgaudet 3/27/73		
D. RANDALL		
	5409818-00004	H
B. Hale 5-29-74		
G. GRAHAM 6-1-73		
	5409818-00005	J
Alan P. Gilbreath 11-15-73		
B. MINOR		
W. C. Brown 12-5-73		
	5409818-00006	K
H. Hammond 4-19-74		
B. MINOR		
W. E. Brent 7-12-74		

FIRST USED ON	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

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

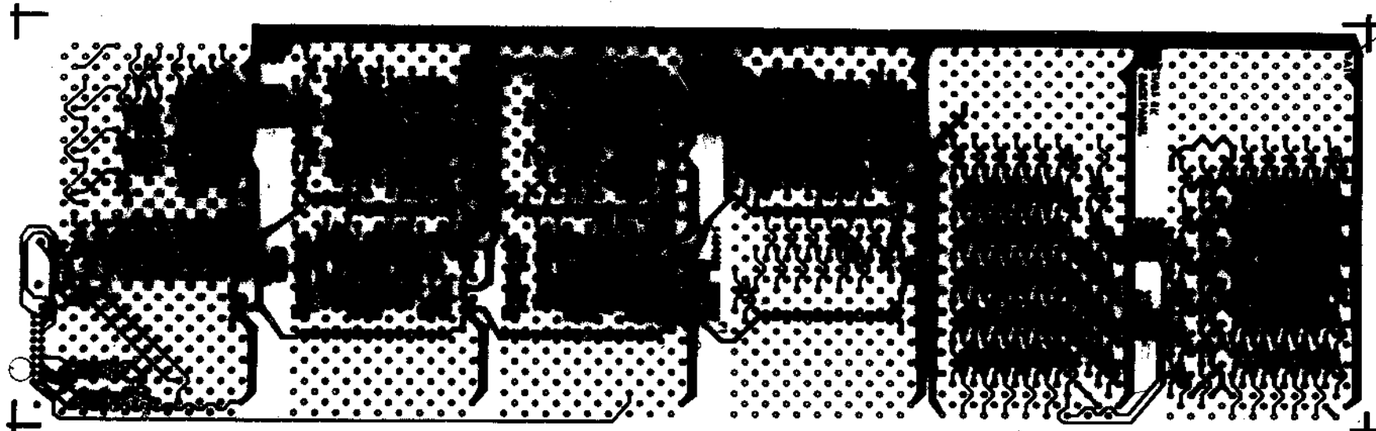
MATERIAL —

FINISH —

DRN. ROBICHAUD	DATE 3-20-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. C. TESCHNER	DATE 3-21-72	
ENG. W. MINOR	DATE 3-21-72	TITLE CIRCUIT SCHEMATIC (8K)
PROJ. ENG. B.D. WEEKS	DATE 3-21-72	
PROD. A.K. PETERSON	DATE 3-21-72	
FIRST USED ON NEXT HIGHER ASSY.		
C-IA-5409818-0-0		SIZE C CODE CS NUMBER 5409818-0-1 REV. K
SCALE 1/1		
SHEET 1 OF 2		DIST

DEC FORM NO. DRG

F E D C B A



1 2 3 4 5 6 7 8 9

SOLDER SIDE - SIDE #2

REVISIONS	CHANGE NO.	CHK	REV.

DEC FORM NO. DRC

FIRST USED ON	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

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

MATERIAL —/—

FINISH —/—

		DATE
DRN.	ROBICHAUD	3-20-72
CHK'D.	C. TESCHNER	3-21-72
ENG.	W. MINOR	3-21-72
PROJ. ENG.	B.D. WEEKS	3-21-72
PROD.	R. K. PETERSON	3-21-72

FIRST USED ON NEXT HIGHER ASSY.

C-1A-5409818-0-0

SCALE 1/1

SHEET 2 OF 2

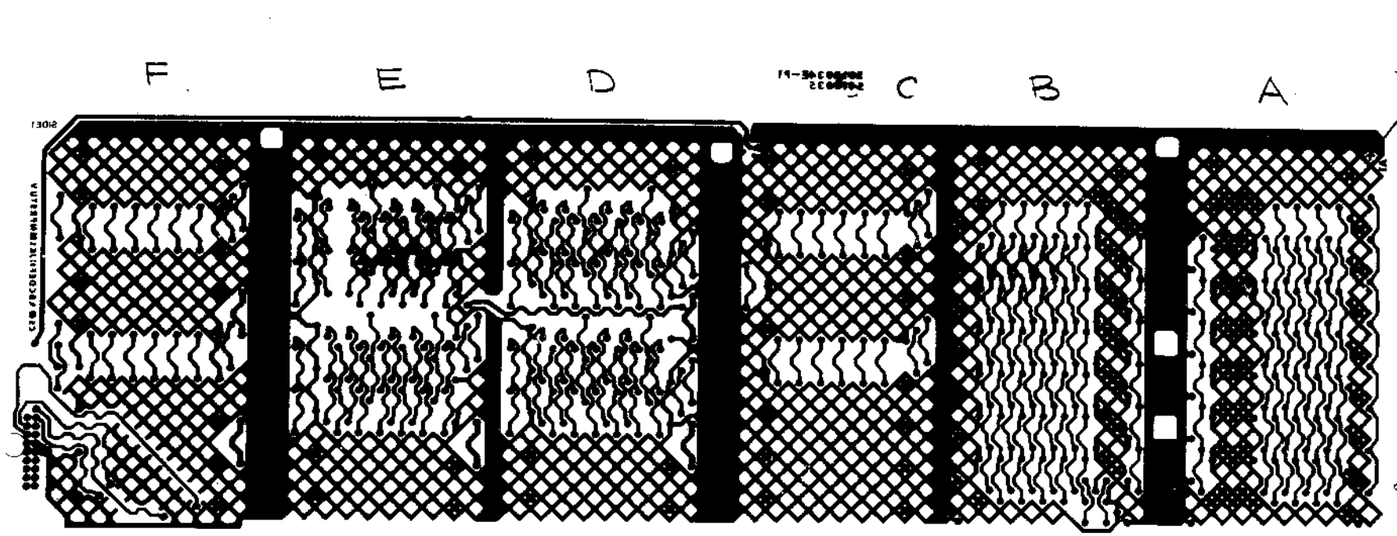
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
CIRCUIT
SCHEMATIC (8K)

SIZE	CODE	NUMBER	REV.
C	CS	5409818-0-1	K

DIST.

SIZE	CODE	NUMBER	REV.
C	CS	5409818-0-1	K



BLOCK SIDE
(SIDE #1)
— AS SEEN THRU SIDE #2 —

REVISIONS

CHK	CHANGE NO.	REV.
	5410035-00001 2/1/73 G. GRAHAM 2-13-73	B
	5410035-00002 3/9/73 D. RANDALL 3/12/73	C
	5410035-00003 5-25-73 G.GRAHAM 6-1-73	D
	5410035-00004 7/11/73 D. RANDALL 7/24/73	E
	5410035-00005 11-15-73 B. MINOR 11-21-73	F
	5410035-00006 4-23-74 B.MINOR 7-17-74	H

DEC FORM NO.
DRC

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.
PDP-1105		PARTS LIST	

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

MATERIAL —/—/—
FINISH —/—/—

DRN	DATE 5-11-72
CHKD C. Teschner	DATE 5-11-72
ENG W. Minor	DATE 5-11-72
PROJ. ENG. B. D. Weeks	DATE 5-12-72
PROD. R. K. Peterson	DATE 5/11/72

NEXT HIGHER ASSY. C-IA-5410035-0-0
SCALE 1/1
SHEET 1 OF 2

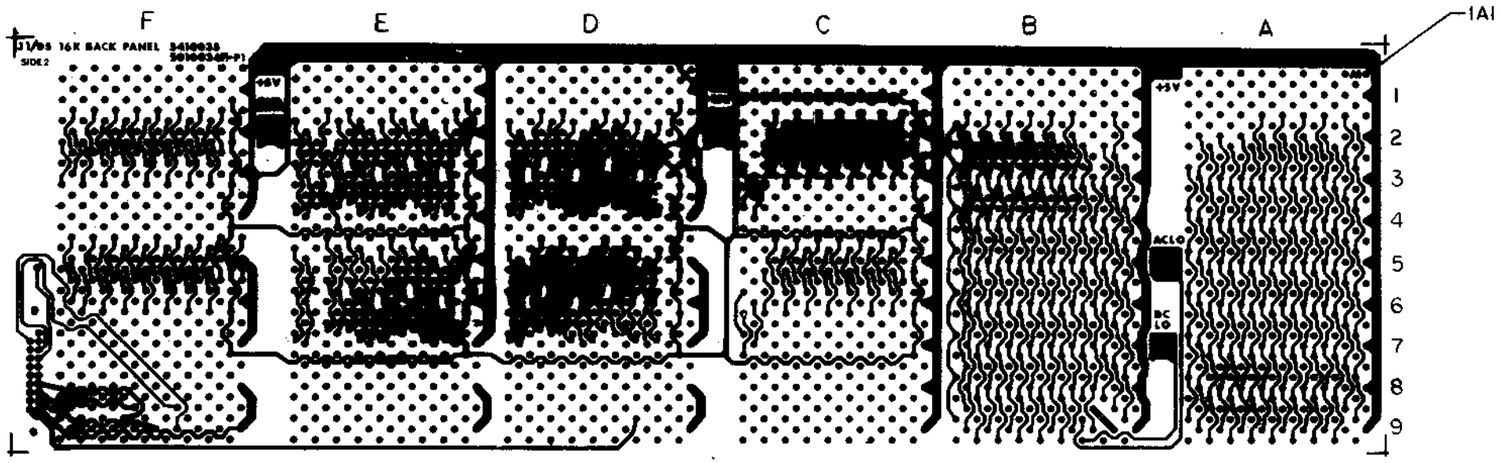
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE CIRCUIT SCHEMATIC (16K)

SIZE	CODE	NUMBER	REV.
C	CS	5410035-0-1	H

DIST.

SIZE C CODE CS NUMBER 5410035-0-1 REV. H



SOLDER SIDE
(SIDE 2)

REVISIONS	REV.
CHANGE NO.	
CHK	

FIRST USED ON OPTION/MODEL: PDP11/05	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	

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

MATERIAL —

FINISH —

DRN. R Cook	DATE 5/4/72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHKD. C. Teschner	DATE 5-4-72	
ENG. W. Munro	DATE 5-4-72	
PROJ. ENG. B.B. Wenks	DATE 5-11-72	
PROD. R.K. Peterson	DATE 5/15/72	

NEXT UNEMON ASSY
E-IA-5410035-0-0

SCALE —

SHEET 2 OF 2

TITLE
CIRCUIT
SCHEMATIC (16 K)

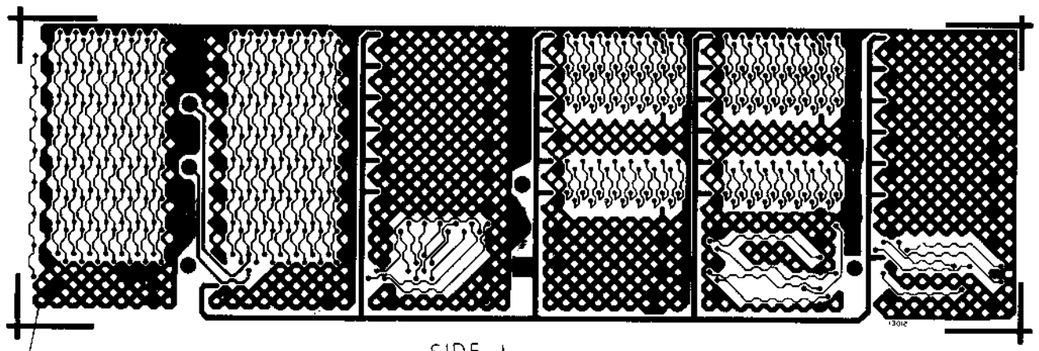
SIZE	CODE	NUMBER	REV.
C	CS	5410035-0-1	H

DIST.

SPEC CODE: cCS5410035-0-1 REV. H

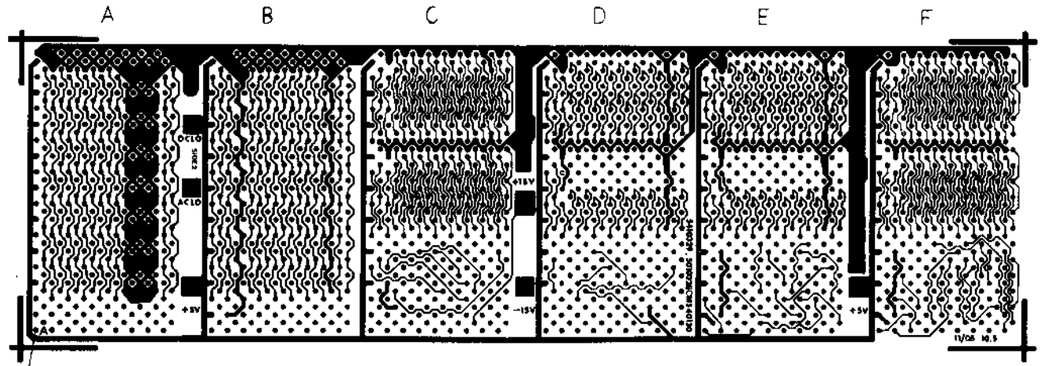
DEC FORM NO. DRC

NOTES:



SIDE 1

A01A1



SIDE 2

A01A1

IC TYPE	GND	+ 5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

REF		ETCH WIRE LIST	K-WL-1105-0-B	5
1		ETCHED CIRCUIT BOARD	5010328	4
REF		MODULE ECO HISTORY	B-MH-5410329-0-0	3
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-5410329-0-0	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-5410329-0-0	1
QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL: 1105

ETCH BOARD REV: C

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

REV	CHANGE NO	CHK
B	5410329-0001	B. ARMSTRONG 4-22-74

REVISIONS

DRN	Wilson	DATE 3/5/73
CHK'D		DATE 7-20-73
PROJ. ENG		DATE 7-23-73
MFG		DATE 8-3-73

NEXT HIGHER ASSY: D-IA-7009241-0-0

SCALE: NONE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CIRCUIT SCHEMATIC (1105 10.5)

SIZE D | CODE CS | NUMBER 5410329-0-1 | REV. B

DIST.

DEC FORM NO DRD-1394

5410329-0-0 B