

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

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SEQUENCE

SEQUENCE

DRAWING DIRECTORY	B-DD-VT11-0
VT11 DISPLAY PROCESSOR (PL)	A-PL-VT11-0-0
WIRE LIST (VT11)	K-WL-VT11-0-1
VT11 CONFIGURATION	D-AR-VT11-0-2
WIRED ASSY	C-IA-7009450-0-0
AWT REVISION STATUS	A-WT-7009450-0
CABLE KEYBD INTERLOCK	C-IA-7009248-0-0
SCOPE CONNECTOR CABLE	D-IA-7009449-0-0
VT40 DISP. GENERATOR	D-CS-A320-0-1
VT40 DISP. CONTROL	D-CS-M7013-0-1
BUS CONTROL AND BOOTSTRAP	D-CS-M7014-YA-1
CIRC. SCHEM. (BACKPLANE)	D-CS-5410094-0-0
BASE DIAGRAMS	D-SP-GT40-0-2
DISPLAY PROCESSOR	D-BD-GT40-0-4
SET GRAPHIC MODE	D-FD-GT40-0-5
DISPLAY JUMP	D-FD-GT40-0-6
NO OPERATION	D-FD-GT40-0-7
LOAD STATUS REGISTER A	D-FD-GT40-0-8
LOAD STATUS REGISTER B	D-FD-GT40-0-9
GRAPH X OR GRAPH Y	D-FD-GT40-0-10
POINT MODE	D-FD-GT40-0-11
VECTOR MODE	D-FD-GT40-0-12
SHORT VECTOR OR REL. POINT	D-FD-GT40-0-13
CHARACTER GENERATOR	D-FD-GT40-0-14
CHAR. GEN. LOCK TIMING	D-TD-GT40-0-16
DA11-F/DD11-B OPTION HARNESS	D-IA-7009563-0-0

ACCEPTANCE PROCEDURE
CHECKOUT PROCEDURE

MFG SET

A-SP-VT11-0-3
A-SP-VT11-0-5

UNIT VARIATIONS		PRINT SET	
VAR	TITLE		

REVISIONS	
REV	CHG. NO.
A	VT11-1
B	VT11-2
C	VT11-3
D	VT11-4

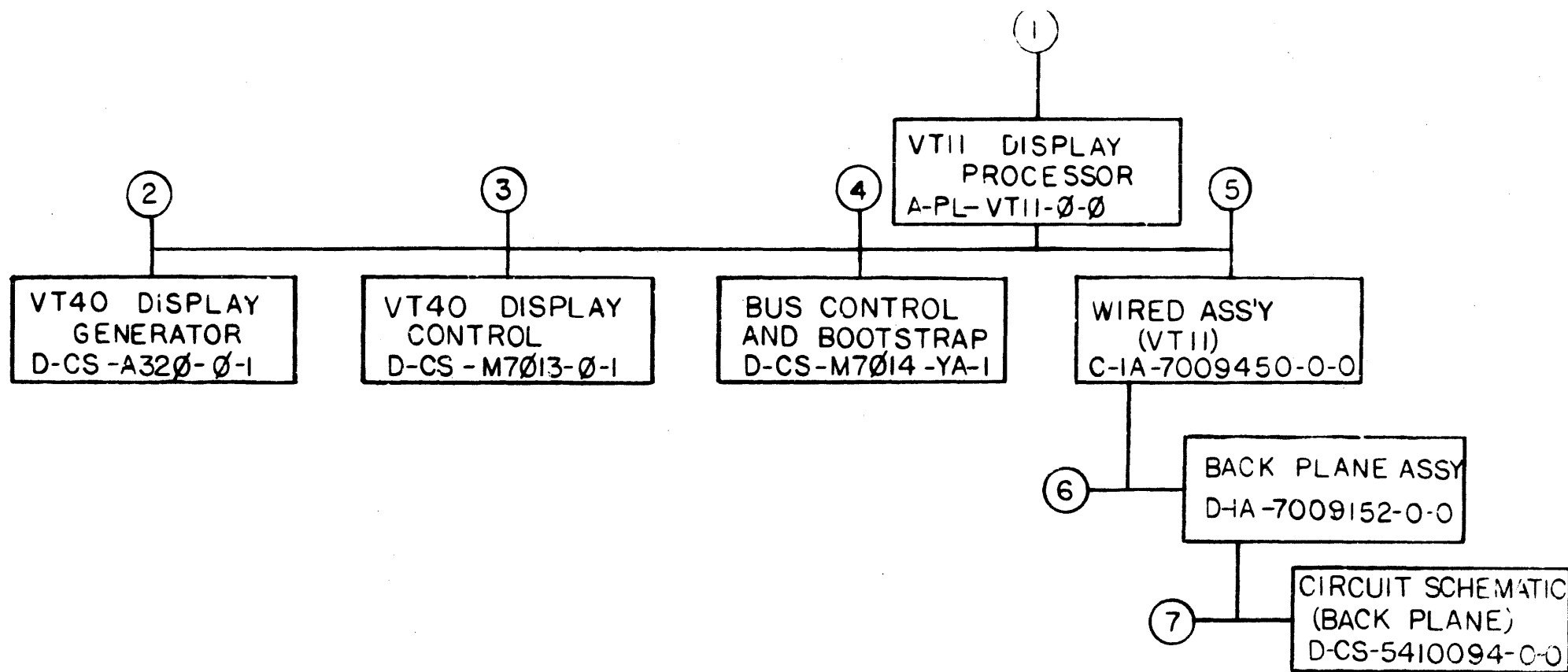
DATE	CHG. NO.
1-74	VT11-1
5-74	VT11-2
9-74	VT11-3
5-75	VT11-4

USED ON OPTION/MODEL	

DRN.	DATE
D. HEALY	5/25/73
CHKD. <i>J. Healy</i>	DATE 1/24/75
PROJ. ENG. <i>J. Healy</i>	DATE 9-26-73
PROD.	DATE 1-31-75
FIELD SERV.	DATE

TITLE	
VT11 DISPLAY PROCESSOR	
SIZE	CODE
B	DD
NUMBER	
VT11-A	
REV	
DIST	

SHEET OF



TITLE	SIZE	CODE	NUMBER	REV
VTII DISPLAY PROCESSOR	B	DO	VTII-Ø	D
SHEET 2 OF 3				

CUSTOMER PRINT SET		ELECTRICAL					CUSTOMER PRINT SET		MECHANICAL							
VT11	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE	VT11	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE	
X		1	D-AR-VT11-0-2	*	1	VT11 CONFIGURATION		X		1	A-PL-VT11-0-0	#	1	VT11 DISPLAY PROCESSOR		
	X		A-SP-VT11-0-3	*		ACCEPTANCE PROCEDURE		X			D-IA-7009563-0-0	#	1	DALL-F/DALL-B OPTION HARNESS		
			A-SP-VT11-0-4	*		ENGINEERING SPECS		X			C-IA-7009248-0-0	#	1	CABLE KEYBOARD INTERLOCK		
K			D-SP-GT40-0-2	#	4	BASE DIAGRAMS		X			D-IA-7009449-0-0	#	1	SCOPE CONNECTOR CABLE		
K			D-DB-GT40-0-4	#	1	DISPLAY PROCESSOR										
K			D-FD-GT40-0-5	#	1	SET GRAPHIC MODE										
K			D-FD-GT40-0-6	#	1	DISPLAY JUMP										
K			D-FD-GT40-0-7	#	1	NO OPERATION										
K			D-FD-GT40-0-8	#	1	LOAD STATUS REGISTER A										
K			D-FD-GT40-0-9	#	1	LOAD STATUS REGISTER B										
K			D-FD-GT40-0-10	#	1	GRAPH X OR GRAPH Y		X		2	D-CS-A320-0-1	#	11	VT40 DISPLAY GENERATOR		
K			D-FD-GT40-0-11	#	1	POINT MODE					K-CO-A320-0-4	-		X-Y COORDINATE HOLE LOC		
X			D-FD-GT40-0-12	#	1	VECTOR MODE					D-AH-A320-0-5	1		ASSY DRILLING HOLE LAYOUT		
K			D-FD-GT40-0-13	#	1	SHORT VECTOR OR REL. POINT					B-MH-A320-0-6	1		MODULE ECO HISTORY		
K			D-FD-GT40-0-14	#	1	CHARACTER GENERATOR					5010099	-		ETCHED CIRCUIT BOARD		
X			D-TD-GT40-0-16	#	5	CHAR. GEN. LOCK TIMING										
	X		A-SP-VT11-0-5	*		CHECKOUT PROCEDURE										
X		2	D-CS-A320-0-1	#	11	VT40 DISPLAY GENERATOR		X		3	D-CS-M7013-0-1	#	12	VT40 DISPLAY CONTROL		
											K-CO-M7013-0-4	-		X-Y COORDINATE HOLE LOC		
											D-AH-M7013-0-5	1		ASSY DRILLING HOLE LAYOUT		
X		3	D-CS-M7013-0-1	#	12	VT40 DISPLAY CONTROL					B-MH-M7013-0-6	1		MODULE ECO HISTORY		
K			K-RL-M7013-0-8	#		CHARACTER GENERATOR ROM PATTERNS					5010146	-		ETCHED CIRCUIT BOARD		
								X		4	D-CS-M7014-YA-1	#	11	BUS CONTROL AND BOOTSTRAP		
											K-CO-M7014-0-4	-		X-Y COORDINATE HOLE LOCATION		
											D-AH-M7014-0-5	1		ASSY DRILLING HOLE LAYOUT		
											B-MH-M7014-YA-6	1		MODULE ECO HISTORY		
											5010129	-		ETCHED CIRCUIT BOARD		
X		5	C-IA-7009450-0-0	A	1	WIRED ASSY (VT11)		X		5	C-IA-7009450-0-0	#	1	WIRED ASSY		
C			K-WL-VT11-0-1	A	-	WIRE LIST (VT11)					A-SS-7407846-0-0	1		LOGIC SERIAL NO. LABELS		
X			A-WT-7009450-0	#	1	AWT REVISION STATUS										
X		7	D-CS-5410094-0-1	#	1	CIRCUIT SCHEMATIC				7	D-CS-5410094-0-1	1		CIRCUIT SCHEMATIC		
											K-CO-5410094-0-4	-		X-Y COORDINATE HOLE LOC.		
											E-AH-5410094-0-5	1		ASSY DRILLING HOLE LAYOUT		
											B-MH-5410094-0-6	1		MODULE ECO HISTORY		
											5010093	-		ETCHED CIRCUIT BOARD		
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 VT11 DISPLAY PROCESSOR		SHEET 3 OF 3		SIZE CODE B DD		NUMBER VT11-0		REV D	

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS
PARTS LIST

QUANTITY / VARIATION

MADE BY D. HEALY	CHECKED <i>J. B. Law</i>	SECTION 1
DATE 4/25/73	DATE 4-25-73	ISSUED SECT. 1
ENG <i>John G. DeWitt</i>	PROD <i>Part 3.0</i>	
DATE 9-26-73	DATE 9-30-73	

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION
1	D-CS-A320-0-1	VT40 DISPLAY GENERATOR
2	D-CS-M'013-0-1	VT40 DISPLAY CONTROL
3	D-CS-M7014-YA-1	BUS CONTROL AND BOOTSTRAP
4	C-IA-7009450-0-0	WIRED ASSY
5	D-IA-7009099-0-0	POWER HARNESS (BAIK)
6	C-IA-7009248-0-0	CABLE, KEYBD INTERLOCK
7	D-IA-7009449-20-0	SCOPE CONNECTOR CABLE
8	1700021-00	ELECTRO MAGNETIC SHIELD
9	D-UA-BC11A-2-0	UNIBUS CABLE
10	D-IA-7009563-0-0	DA11-F/DD11-B OPTION HARNESS
	D-AR-VT11-0-2	VT11 CONFIGURATION
NOTE: FOR 11/35-11/40 WITH SERIAL NO. LESS THAN 6000, OR H960-D,E WITH SERIAL NO. LESS THAN 7000 USE HARNESS 7009099.		
FOR DRAWING DIRECTORY REFER TO:		
B-DD-VT11-0		

1																			
1																			
1																			
1																			
1																			
1																			
1																			
1																			
REF																			

TITLE VT11 DISPLAY PROCESSOR	ASSY NO. NONE	SIZE A	CODE PL	NUMBER VT11-0-0	REV B	ECO NO VT11-00003
SHEET 1 OF 1		DIST				

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DIGITAL EQUIP. CORP.

REV. NUMBER
 SIZE CODE
 NUMBER

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VTII				
PARTS LIST				
DRN.	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS TITLE WIRE LIST (VTII)		
<i>J. Deane</i>	4/26/73			
CHK'D.	DATE			
<i>A. Vogelsang</i>	7/20/73			
ENG.	DATE			
<i>J. Elsbree</i>	7/30/73			
PROJ. ENG.	DATE	NEXT HIGHER ASSEMBLY C-IA-7009450-0-0		
<i>J. Elsbree</i>	7/30/73			
PROD.	DATE	SCALE <i>1/1</i>		
<i>Paul Higin</i>	7/31/73			
SIZE CODE		NUMBER	REV.	
K WL		VTII-Ø-1	A	
SHEET 1 OF 1		DIST		

REVISIONS	CHANGE NO.	REV.
<i>22</i>	VT11-00002	
<i>E. REYNOLD 5-29-74</i>		
<i>J. Elsbree 6-5-74</i>		

DEC FORM NO. DRB 109

VT11.A		WRP288.V22(22) 11/06/73				1-JUN-74		3:7		PAGE 1		
RUN NAME	A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW RV PG Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
+15V		D02R2		1-01 *	H			1	24 AWG		HAND WIRE	1
+15V		F03R2		1-02 *	H				24 AWG		H TO WHERE	1
+15V				1						6-6/8		1
+5V VDC		A01A2		1-01 *	H			2		P	HAND WIRE	2
+5V VDC		A02A2		1-02 *	H			1		P	HAND WIRE	2
+5V VDC		A03A2		1-03 *	H			2		P	HAND WIRE	2
+5V VDC		A04A2		1-04 *	H			1		P	HAND WIRE	2
+5V VDC		B04A2		1-05 *	H			2		P	HAND WIRE	2
+5V VDC		B03A2		1-06 *	H			1		P	HAND WIRE	2
+5V VDC		B02A2		1-07 *	H			2		P	HAND WIRE	2
+5V VDC		B01A2		1-08 *	H			1		P	HAND WIRE	2
+5V VDC		C01A2		1-09 *	H			2		P	HAND WIRE	2
+5V VDC		C02A2		1-10 *	H			1		P	HAND WIRE	2
+5V VDC		C03A2		1-11 *	H			2		P	HAND WIRE	2
+5V VDC		C04A2		1-12 *	H			1		P	HAND WIRE	2
+5V VDC		D04A2		1-13 *	H			2		P	HAND WIRE	2
+5V VDC		D03A2		1-14 *	H			1		P	HAND WIRE	2
+5V VDC		D02A2		1-15 *	H			2		P	HAND WIRE	2
+5V VDC		D01A2		1-16 *	H			1		P	HAND WIRE	2
+5V VDC		E01A2		1-17 *	H			2		P	HAND WIRE	2
+5V VDC		E02A2		1-18 *	H			1		P	HAND WIRE	2
+5V VDC		E03A2		1-19 *	H			2		P	HAND WIRE	2
+5V VDC		E04A2		1-20 *	H			1		P	HAND WIRE	2
+5V VDC		F04A2		1-21 *	H			2		P	HAND WIRE	2
+5V VDC		F03A2		1-22 *	H			1		P	HAND WIRE	2
+5V VDC		F02A2		1-23 *	H			2		P	HAND WIRE	2
+5V VDC		F01A2		1-24 *	H					P	H TO WHERE	2
+5V VDC				1						91-2/8		2
ASL A01	H	A02P2		1-01 *				1				3
ASL A01	H	D04P2		1-02 *								3
ASL A01				1						12-0/8		3
ASL A02	H	A02L1		1-01 *				1				4
ASL A02	H	D04N2		1-02 *								4
ASL A02				1						12-4/8		4
ASL BELL CHAR	L	D02H2		1-01 *				1				5
ASL BELL CHAR	L	D04E2		1-02 *								5
ASL BELL CHAR				1						4-2/8		5
ASL RESUME	H	A02F2		1-01 *				1				6
ASL RESUME	H	A04L2		1-02 *								6
ASL RESUME				1						4-4/8		6

EQUIPMENT CORPORATION

VT11.A
RUN NAME

WRP288.V22(22) 11/06/73

A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE 2 RUN NUMBE
H	A02H2		1-01 *							1				7
H	A04H1		1-02 *											7
			1									3-6/8		7
H	B02K2		1-01 *							1				8
H	B04R1		1-02 *											8
			1									4-1/8		8
H	A02D2		1-01 *							1				9
H	C04R1		1-02 *											9
			1									10-2/8		9
L	A04J1		1-01 *							1				10
L	B02L2		1-02 *											10
			1									6-6/8		10
L	A02E1		1-01 *							1				11
L	A04K1		1-02 *											11
			1									4-4/8		11
H	A02V2		1-01 *							1				12
H	C04P1		1-02 *							2				12
H	D03N2		1-03 *											12
			1									4-0/8		12
H	B02B1		1-01 *							2				13
H	B04T2		1-02 *							1				13
H	D03L2		1-03 *											13
			1									13-4/8		13
H	B02E1		1-01 *							2				14
H	B04V1		1-02 *							1				14
H	D03P2		1-03 *											14
			1									13-1/8		14
H	A02M1		1-01 *							1				15
H	C04E1		1-02 *							2				15
H	D03F2		1-03 *											15
			1									14-4/8		15
H	A02N1		1-01 *							1				16
H	C04A1		1-02 *							2				16
H	D03K1		1-03 *											16
			1									15-0/8		16

VT11.A
RUN NAME

WRP288.V22(22) 11/06/73

A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE 3 RUN NUMBE
H	B02R2		1-01 *							2				17
H	C04B1		1-02 *							1				17
H	D03L1		1-03 *											17
			1									11-4/8		17
H	B04V2		1-01 *							2				18
H	C02B1		1-02 *							1				18
H	D03H1		1-03 *											18
			1									11-4/8		18
H	B02N2		1-01 *							2				19
H	B04U2		1-02 *							1				19
H	D03F1		1-03 *											19
			1									11-5/8		19
H	B04N1		1-01 *							2				20
H	B02P2		1-02 *							1				20
H	E03A1		1-03 *											20
			1									13-4/8		20
H	C02L1		1-01 *							2				21
H	C04H2		1-02 *							1				21
H	E03D2		1-03 *											21
			1									12-6/8		21
H	B04F1		1-01 *							1				22
H	C02L2		1-02 *											22
			1									6-6/8		22
H	C02M1		1-01 *							1				23
H	C04M2		1-02 *											23
			1									4-2/8		23
H	C04K2		1-01 *							1				24
H	E02D1		1-02 *											24
			1									8-6/8		24
H	C04K1		1-01 *							1				25
H	D02P2		1-02 *											25
			1									7-0/8		25
H	C04J1		1-01 *							1				26
H	D02M2		1-02 *											26
			1									7-0/8		26

VT11.A RUN NAME	A/P	WRP288.V22(22) 11/06/73 PIN NAME	ORDER PIN	HAY - ORDER	Q	DNA=	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE RUM NUMB
BDL DB 15	H	B04J1		1-01 *							1				27
BDL DB 15	H	D02B2		1-02 *											27
BDL DB 15				1									10-0/8		27
BRM COUNT X	H	E03V1		1-01 *							1				28
BRM COUNT X	H	F02M1		1-02 *											28
BRM COUNT X				1									5-0/8		28
BRM COUNT Y	H	F02F1		1-01 *							1				29
BRM COUNT Y	H	F03M1		1-02 *											29
BRM COUNT Y				1									3-6/8		29
BRM DX09	H	D02F1		1-01 *							1				30
BRM DX09	H	E03R1		1-02 *											30
BRM DX09				1									7-0/8		30
BRM DY09	H	D02K1		1-01 *							1				31
BRM DY09	H	F03D1		1-02 *											31
BRM DY09				1									8-2/8		31
BUS A00	L	A02U1		1-01 *							2				32
BUS A00	L	B01H2		1-02 *							1				32
BUS A00	L	D01H2		1-03 *											32
BUS A00				1									13-0/8		32
BUS A01	L	A02K1	B01H1	1-01 *							2				33
BUS A01	L	B01H1		1-02 *							1		3-5		33
BUS A01	L	D01H1		1-03 *											33
BUS A01				1									14-2/8		33
BUS A02	L	A02P1		1-01 *							2				34
BUS A02	L	B01J2		1-02 *							1				34
BUS A02	L	D01J2		1-03 *											34
BUS A02				1									13-4/8		34
BUS A03	L	A02M1	B01J1	1-01 *							2				35
BUS A03	L	B01J1		1-02 *							1		3-5		35
BUS A03	L	D01J1		1-03 *											35
BUS A03				1									13-6/8		35
BUS A04	L	A02J1		1-01 *							2				36
BUS A04	L	B01K2		1-02 *							1				36
BUS A04	L	D01K2		1-03 *											36
BUS A04				1									14-4/8		36

VT11.A RUN NAME	A/P	WRP288.V22(22) 11/06/73 PIN NAME	ORDER PIN	HAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE RUM NUMB
BUS A05	L	B02J2	B01K1	1-01 *							2				37
BUS A05	L	B01K1		1-02 *							1		3-5		37
BUS A05	L	D01K1		1-03 *											37
BUS A05				1									12-2/8		37
BUS A06	L	B01L2		1-01 *							1				38
BUS A06	L	B02M1		1-02 *							2				38
BUS A06	L	D01L2		1-03 *											38
BUS A06				1									10-5/8		38
BUS A07	L	B02N1	B01L1	1-01 *							2				39
BUS A07	L	B01L1		1-02 *							1		3-5		39
BUS A07	L	D01L1		1-03 *											39
BUS A07				1									11-6/8		39
BUS A08	L	B01M2		1-01 *							1				40
BUS A08	L	B02P1		1-02 *							2				40
BUS A08	L	D01M2		1-03 *											40
BUS A08				1									11-0/8		40
BUS A09	L	B01M1		1-01 *							2				41
BUS A09	L	C02E2		1-02 *							1				41
BUS A09	L	D01M1		1-03 *											41
BUS A09				1									12-6/8		41
BUS A10	L	B01N2		1-01 *							2				42
BUS A10	L	C02F2		1-02 *							1				42
BUS A10	L	D01N2		1-03 *											42
BUS A10				1									12-2/8		42
BUS A11	L	B01N1		1-01 *							2				43
BUS A11	L	C02M2		1-02 *							1				43
BUS A11	L	D01N1		1-03 *											43
BUS A11				1									12-4/8		43
BUS A12	L	B01P2		1-01 *							2				44
BUS A12	L	C02P1		1-02 *							1				44
BUS A12	L	D01P2		1-03 *											44
BUS A12				1									11-6/8		44
BUS A13	L	B01P1		1-01 *							1				45
BUS A13	L	D02D2		1-02 *							2				45
BUS A13	L	D01P1		1-03 *											45
BUS A13				1									12-3/8		45

VT11.A
RUN NAME

WRP288.V22(22) 11/06/73
A/P PIN ORDER BAY -
NAME PIN ORDER

Q DRAW RV PG Y X Z REMARKS

1-JUN-74
LENGTH

317
EXCEPTIONS

PAGE 6
RUN
NUMBER

BUS A14	L	B01R2	1-01 *							1					46
BUS A14	L	D02F2	1-02 *							2					46
BUS A14	L	D01R2	1-03 *												46
BUS A14			1										12-2/8		46
BUS A15	L	B01R1	1-01 *	1									3-5		47
BUS A15	L	D01R1	1-02 *							2					47
BUS A15	L	D02M1	1-03 *												47
BUS A15			1										11-6/8		47
BUS A16	L	B01S2	1-01 *												48
BUS A16	L	D02J1	1-02 *							2					48
BUS A16	L	D01S2	1-03 *												48
BUS A16			1										12-0/8		48
BUS A17	L	B01S1	1-01 *												49
BUS A17	L	D02B1	1-02 *							2					49
BUS A17	L	D01S1	1-03 *												49
BUS A17			1										12-4/8		49
BUS AC LO	L	B01F1	1-01 *	2									3-5		50
BUS AC LO	L	D01F1	1-02 *							1					50
BUS AC LO	L	F02E2	1-03 *							2					50
BUS AC LO	L	F03K1	1-04 *												50
BUS AC LO			1										20-4/8		50
BUS BBSY	L	A02F1	1-01 *							2					51
BUS BBSY	L	A01P2	1-02 *							1					51
BUS BBSY	L	C01P2	1-03 *												51
BUS BBSY			1										12-4/8		51
BUS BG 04	H	B01E2	1-01 *												52
BUS BG 04	H	E02M1	1-02 *												52
BUS BG 04			1										11-6/8		52
BUS BG 04 OUT 03	H	D01E2	1-01 *												53
BUS BG 04 OUT 03	H	E02L1	1-02 *												53
BUS BG 04 OUT 03			1										6-4/8		53
BUS BG 05	H	B01B1	1-01 *												54
BUS BG 05	H	E02P2	1-02 *												54
BUS BG 05			1										12-6/8		54
BUS BG 05 OUT 03	H	D01B1	1-01 *												55
BUS BG 05 OUT 03	H	E02R2	1-02 *												55
BUS BG 05 OUT 03			1										7-6/8		55

VT11.A
RUN NAME

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A/P PIN ORDER BAY -
NAME PIN ORDER

Q DRAW RV PG Y X Z REMARKS

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BUS BG 06	H	B01A1	1-01 *												56
BUS BG 06	H	E02R1	1-02 *												56
BUS BG 06			1										13-0/8		56
BUS BG 06 OUT 03	H	D01A1	1-01 *												57
BUS BG 06 OUT 03	H	E02N2	1-02 *												57
BUS BG 06 OUT 03			1										7-6/8		57
BUS BG 07	H	A01V1	1-01 *												58
BUS BG 07	H	D02S1	1-02 *												58
BUS BG 07			1										11-0/8		58
BUS BG 07 OUT 03	H	C01V1	1-01 *												59
BUS BG 07 OUT 03	H	E02S1	1-02 *												59
BUS BG 07 OUT 03			1										8-2/8		59
BUS BR 04	L	B01D2	1-01 *												60
BUS BR 04	L	D01D2	1-02 *							2					60
BUS BR 04	L	E02K1	1-03 *												60
BUS BR 04			1										14-4/8		60
BUS BR 05	L	B01C1	1-01 *	1									3-5		61
BUS BR 05	L	D01C1	1-02 *							2					61
BUS BR 05	L	E02J1	1-03 *												61
BUS BR 05			1										15-0/8		61
BUS BR 06	L	A01U2	1-01 *												62
BUS BR 06	L	C01U2	1-02 *							2					62
BUS BR 06	L	E02H1	1-03 *												62
BUS BR 06			1										15-4/8		62
BUS BR 07	L	A01T2	1-01 *												63
BUS BR 07	L	C01T2	1-02 *							2					63
BUS BR 07	L	E02F1	1-03 *												63
BUS BR 07			1										15-4/8		63
BUS C00	L	B01U2	1-01 *												64
BUS C00	L	D01U2	1-02 *							2					64
BUS C00	L	F02B2	1-03 *												64
BUS C00			1										15-2/8		64
BUS C01	L	A02C1	1-01 *												65
BUS C01	L	B01T2	1-02 *							2					65
BUS C01	L	D01T2	1-03 *												65
BUS C01			1										15-6/8		65

VT11.A RUN NAME	A/P	WHP200.V22(22) 11/06/73 PIN NAME	ORDER PIN	MAY - ORDER	U	DNAM	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE # NUM NUMBER
BUS D00	L	A01C1		1-01 *							1				66
BUS D00	L	B02D2		1-02 *							2				66
BUS D00	L	C01C1		1-03 *											66
BUS D00				1									13-0/0		66
BUS D01	L	A01D2		1-01 *							1				67
BUS D01	L	B02F2		1-02 *							2				67
BUS D01	L	C01D2		1-03 *											67
BUS D01				1									12-2/0		67
BUS D02	L	A01D1		1-01 *							1				68
BUS D02	L	B02H2		1-02 *							2				68
BUS D02	L	C01D1		1-03 *											68
BUS D02				1									12-4/0		68
BUS D03	L	A01E2		1-01 *							1				69
BUS D03	L	B02E2		1-02 *							2				69
BUS D03	L	C01E2		1-03 *											69
BUS D03				1									12-2/0		69
BUS D04	L	A01E1		1-01 *							1		3-1		70
BUS D04	L	B02S1		1-02 *							2				70
BUS D04	L	C01E1		1-03 *											70
BUS D04				1									12-2/0		70
BUS D05	L	A01F2		1-01 *							1				71
BUS D05	L	C01F2		1-02 *							2				71
BUS D05	L	C02D2		1-03 *											71
BUS D05				1									11-6/0		71
BUS D06	L	A01F1		1-01 *							2				72
BUS D06	L	C02C1		1-02 *							1				72
BUS D06	L	C01F1		1-03 *											72
BUS D06				1									11-1/0		72
BUS D07	L	A01H2		1-01 *							1				73
BUS D07	L	B02V2		1-02 *							2				73
BUS D07	L	C01H2		1-03 *											73
BUS D07				1									12-3/0		73
BUS D08	L	A01H1		1-01 *	1						1		3-5		74
BUS D08	L	C01H1		1-02 *							2				74
BUS D08	L	C02R1		1-03 *											74
BUS D08				1									12-3/0		74

VT11.A RUN NAME	A/P	WHP200.V22(22) 11/06/73 PIN NAME	ORDER PIN	MAY - ORDER	U	DNAM	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE # NUM NUMBER
BUS D09	L	A01J2		1-01 *							1				75
BUS D09	L	C01J2		1-02 *							2				75
BUS D09	L	C02V1		1-03 *											75
BUS D09				1									12-6/0		75
BUS D10	L	A01J1		1-01 *	1						1		3-5		76
BUS D10	L	C01J1		1-02 *							2				76
BUS D10	L	C02S1		1-03 *											76
BUS D10				1									12-4/0		76
BUS D11	L	A01K2		1-01 *							1				77
BUS D11	L	C01K2		1-02 *							2				77
BUS D11	L	C02U1		1-03 *											77
BUS D11				1									12-4/0		77
BUS D12	L	A01K1		1-01 *	1						1		3-5		78
BUS D12	L	C01K1		1-02 *							2				78
BUS D12	L	D02K1		1-03 *											78
BUS D12				1									15-2/0		78
BUS D13	L	A01L2		1-01 *							1				79
BUS D13	L	C01L2		1-02 *							2				79
BUS D13	L	E02E1		1-03 *											79
BUS D13				1									16-0/0		79
BUS D14	L	A01L1		1-01 *	1						1		3-5		80
BUS D14	L	C01L1		1-02 *							2				80
BUS D14	L	D02U2		1-03 *											80
BUS D14				1									15-4/0		80
BUS D15	L	A01M2		1-01 *							1				81
BUS D15	L	C01M2		1-02 *							2				81
BUS D15	L	D02V1		1-03 *											81
BUS D15				1									15-2/0		81
BUS DC LU	L	B01F2		1-01 *							2				82
BUS DC LU	L	D01F2		1-02 *							1				82
BUS DC LU	L	F02D2		1-03 *											82
BUS DC LU				1									16-6/0		82
BUS INIT	L	A01A1	A01A1	1-01 *							2				83
BUS INIT	L	A01A1		1-02 *							1		3-5		83
BUS INIT	L	C01A1		1-03 *											83
BUS INIT				1									12-0/0		83

VT11.A		WRP288.V22(22) 11/06/73					1-JUN-74		3:7		PAGE		
1	RUN NAME	A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW RV PG Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMI
	BUS INTR	L	A01B1		1-01 *	2							84
	BUS INTR	L	C01B1		1-02 *						3-5		84
	BUS INTR	L	F02B1		1-03 *								84
	BUS INTR				1						19-6/8		84
	BUS MSYN	L	M01V1		1-01 *				1				85
	BUS MSYN	L	D02P1		1-02 *				2				85
	BUS MSYN	L	D01V1		1-03 *								85
	BUS MSYN				1						11-6/8		85
	BUS NPG IN	H	A01U1		1-01 *	1					4-6		86
	BUS NPG IN	H	D02L2		1-02 *								86
	BUS NPG IN				1						11-0/8		86
	BUS NPG OUT	H	C01U1		1-01 *								87
	BUS NPG OUT	H	F02N1		1-02 *								87
	BUS NPG OUT				1						11-0/8		87
	BUS NPR	L	A01S2		1-01 *				1				88
	BUS NPR	L	F02F2		1-02 *								88
	BUS NPR				1						15-6/8		88
	BUS NPR IN	L	C01S2		1-01 *				1				89
	BUS NPR IN	L	D02B2		1-02 *								89
	BUS NPR IN				1						4-5/8		89
	BUS PA	L	A01M1		1-01 *	1					3-5		90
	BUS PA	L	C01M1		1-02 *								90
	BUS PA				1						8-2/8		90
	BUS PB	L	A01N2		1-01 *				1				91
	BUS PB	L	C01N2		1-02 *								91
	BUS PB				1						8-2/8		91
	BUS SACK	L	A01R2	C01R2	1-01 *				1				92
	BUS SACK	L	C01R2		1-02 *				2		1-6		92
	BUS SACK	L	D02C1		1-03 *								92
	BUS SACK				1						12-6/8		92
	BUS SSYN	L	A02H1	M01U1	1-01 *				2				93
	BUS SSYN	L	M01U1		1-02 *				1		3-5		93
	BUS SSYN	L	D01U1		1-03 *								93
	BUS SSYN				1						15-6/8		93
	CCL1 CHAR GEN DONE	H	A02L2		1-01 *				1				94
	CCL1 CHAR GEN DONE	H	D04D2		1-02 *								94
	CCL1 CHAR GEN DONE				1						11-2/8		94

VT11.A		WRP288.V22(22) 11/06/73					1-JUN-74		3:7		PAGE		
1	RUN NAME	A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW RV PG Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBI
	CCL1 CHAR INTENSITY	H	A02M2		1-01 *				1				95
	CCL1 CHAR INTENSITY	H	D04P1		1-02 *								95
	CCL1 CHAR INTENSITY				1						12-0/8		95
	CCL1 CHAR STOP L.P.	H	E04H1		1-01 *				1				96
	CCL1 CHAR STOP L.P.	H	F02H2		1-02 *								96
	CCL1 CHAR STOP L.P.				1						6-4/8		96
	CCL2 BELL	H	A03S2		1-01 *				1				97
	CCL2 BELL	H	D04F2		1-02 *								97
	CCL2 BELL				1						10-4/8		97
	CCL2 DESCEND (0)	H	C03F1		1-01 *				1				98
	CCL2 DESCEND (0)	H	F04V1		1-02 *								98
	CCL2 DESCEND (0)				1						13-0/8		98
	CCL2 RAMP Y (1)	H	C03J1		1-01 *				1				99
	CCL2 RAMP Y (1)	H	F04F1		1-02 *								99
	CCL2 RAMP Y (1)				1						11-2/8		99
	CCL2 RUN (0)	H	C03A1		1-01 *				1				100
	CCL2 RUN (0)	H	F04F2		1-02 *								100
	CCL2 RUN (0)				1						12-4/8		100
	CCL2 STEP X	H	C03E1		1-01 *				1				101
	CCL2 STEP X	H	D04N1		1-02 *								101
	CCL2 STEP X				1						7-2/8		101
	CSC CHARACTER.CR-	H	C04J2		1-01 *				1				102
	CSC CHARACTER.CR-	H	E02S2		1-02 *								102
	CSC CHARACTER.CR-				1						10-2/8		102
	CSC CLR X	H	D03K2		1-01 *				1				103
	CSC CLR X	H	F02J1		1-02 *				2				103
	CSC CLR X	H	F04U2		1-03 *								103
	CSC CLR X				1						13-3/8		103
	CSC CLR X	L	D03D1		1-01 *				1				104
	CSC CLR X	L	F04T2		1-02 *								104
	CSC CLR X				1						10-4/8		104
	CSC CNTRL CHAR DONE	H	D02D1		1-01 *				1				105
	CSC CNTRL CHAR DONE	H	E04M2		1-02 *								105
	CSC CNTRL CHAR DONE				1						7-4/8		105

VT11.A RUN NAME	A/P	WRP288.V22(22) PIN NAME	11/06/73 ORDER PIN	BAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	3:7 EXCEPTIONS	PAGE 1 RUN NUMBER
CSC CR.8I	L	A0481		1-01 *							1				106
CSC CR.8I	L	E02D2		1-02 *											106
CSC CR.8I				1									12-6/8		106
CSC L.F.	H	E04P1		1-01 *							1				107
CSC L.F.	H	F02U2		1-02 *											107
CSC L.F.				1									7-0/8		107
CSC SHIFT INTR	L	D02A1		1-01 *							1				108
CSC SHIFT INTR	L	F04H2		1-02 *											108
CSC SHIFT INTR				1									10-2/8		108
DCR 0-3 (0)	H	C02J2		1-01 *							1				109
DCR 0-3 (0)	H	E03B1		1-02 *											109
DCR 0-3 (0)				1									7-6/8		109
DCR 4-7 (0)	H	C02K2		1-01 *							1				110
DCR 4-7 (0)	H	E03C1		1-02 *											110
DCR 4-7 (0)				1									7-6/8		110
DCR 8.9 (0)	H	C02N1		1-01 *							1				111
DCR 8.9 (0)	H	E03E1		1-02 *											111
DCR 8.9 (0)				1									7-6/8		111
DCR DIS 00 IN	H	D03M1		1-01 *							1				112
DCR DIS 00 IN	H	F03M1		1-02 *											112
DCR DIS 00 IN				1									7-6/8		112
DCR01 OUT	H	F02S2		1-01 *							1				113
DCR01 OUT	H	F03F1		1-02 *											113
DCR01 OUT				1									4-4/8		113
DCR02 OUT	H	F02T2		1-01 *							1				114
DCR02 OUT	H	F03V2		1-02 *											114
DCR02 OUT				1									3-4/8		114
DCR03 OUT	H	F02M2		1-01 *							1				115
DCR03 OUT	H	F03U2		1-02 *											115
DCR03 OUT				1									3-6/8		115
DCR04 OUT	H	F02P2		1-01 *							1				116
DCR04 OUT	H	F03C1		1-02 *											116
DCR04 OUT				1									4-4/8		116
DCR05 OUT	H	E03K1		1-01 *							1				117
DCR05 OUT	H	F03B1		1-02 *											117
DCR05 OUT				1									5-0/8		117

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GM INT 00	L	A03L2		1-01 *	1						1		2-7		118
GM INT 00	L	B04U1		1-02 *											118
GM INT 00				1									6-6/8		118
GM INT 01	L	A03M2		1-01 *	1						1		3-2		119
GM INT 01	L	C04C1		1-02 *											119
GM INT 01				1									7-4/8		119
GM INT 02	L	A03R2		1-01 *	1						1		2-3		120
GM INT 02	L	B04P1		1-02 *											120
GM INT 02				1									5-6/8		120
GM INTENSITY OUT	L	A03T2		1-01 *							1	TWISTED PAIR		HAND WIRE	121
GM INTENSITY OUT	L	B04L2		1-02 *								TWISTED PAIR		H TO WHERE	121
GM INTENSITY OUT				1									5-4/8		121
GM INTERRUPT	H	A04P1		1-01 *							1				122
GM INTERRUPT	H	D02H1		1-02 *											122
GM INTERRUPT				1									11-2/8		122
GM L.P.INTERPT ENA (0)	H	C04M1		1-01 *							1				123
GM L.P.INTERPT ENA (0)	H	F02M1		1-02 *											123
GM L.P.INTERPT ENA (0)				1									12-0/8		123
GND 24 AWG 1		A03C1		1-01 *							1	24 AWG		HAND WIRE	124
GND 24 AWG 1		A03C2		1-02 *								24 AWG		H TO WHERE	124
GND 24 AWG 1				1									2-6/8		124
GND 24 AWG 2		A02C2		1-01 *							1	24 AWG		HAND WIRE	125
GND 24 AWG 2		A02E2		1-02 *							2	24 AWG		HAND WIRE	125
GND 24 AWG 2		A02T1		1-03 *							1	24 AWG		HAND WIRE	125
GND 24 AWG 2		B02B2		1-04 *							2	24 AWG		HAND WIRE	125
GND 24 AWG 2		C02B2		1-05 *							1	24 AWG		HAND WIRE	125
GND 24 AWG 2		C02C2		1-06 *							2	24 AWG		HAND WIRE	125
GND 24 AWG 2		C02N2		1-07 *								24 AWG		H TO WHERE	125
GND 24 AWG 2				1									23-5/8		125

VT11.A
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Q DRAW RV PG Y X Z REMARKS

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GNDS 30 AWG	A01B2	1-01 *		1		126					
GNDS 30 AWG	A01C2	1-02 *		2		126					
GNDS 30 AWG	A01N1	1-03 *		1		126					
GNDS 30 AWG	A01P1	1-04 *		2		126					
GNDS 30 AWG	A01R1	1-05 *		1		126					
GNDS 30 AWG	A01S1	1-06 *		2		126					
GNDS 30 AWG	A01T1	1-07 *		1		126					
GNDS 30 AWG	A01V2	1-08 *		2		126					
GNDS 30 AWG	B01B2	1-09 *		1		126					
GNDS 30 AWG	B01C2	1-10 *		2		126					
GNDS 30 AWG	B01D1	1-11 *		1		126					
GNDS 30 AWG	B01E1	1-12 *		2		126					
GNDS 30 AWG	B01T1	1-13 *		1		126					
GNDS 30 AWG	B01V2	1-14 *		2		126					
GNDS 30 AWG	C01B2	1-15 *		1		126					
GNDS 30 AWG	C01C2	1-16 *		2		126					
GNDS 30 AWG	C01N1	1-17 *		1		126					
GNDS 30 AWG	C01P1	1-18 *		2		126					
GNDS 30 AWG	C01R1	1-19 *		1		126					
GNDS 30 AWG	C01S1	1-20 *		2		126					
GNDS 30 AWG	C01T1	1-21 *		1		126					
GNDS 30 AWG	C01V2	1-22 *		2		126					
GNDS 30 AWG	D01B2	1-23 *		1		126					
GNDS 30 AWG	D01C2	1-24 *		2		126					
GNDS 30 AWG	D01D1	1-25 *		1		126					
GNDS 30 AWG	D01E1	1-26 *		2		126					
GNDS 30 AWG	D01T1	1-27 *		1		126					
GNDS 30 AWG	D01V2	1-28 *		1		126					
		1									

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GNDS ETCH	A01C2	1-01 *	H	2		P		HAND WIRE	127		
GNDS ETCH	A02C2	1-02 *	H	1		P		HAND WIRE	127		
GNDS ETCH	A03C2	1-03 *	H	2		P		HAND WIRE	127		
GNDS ETCH	A04C2	1-04 *	H	1		P		HAND WIRE	127		
GNDS ETCH	A04T1	1-05 *	H	2		P		HAND WIRE	127		
GNDS ETCH	A03T1	1-06 *	H	1		P		HAND WIRE	127		
GNDS ETCH	A02T1	1-07 *	H	2		P		HAND WIRE	127		
GNDS ETCH	A01T1	1-08 *	H	1		P		HAND WIRE	127		
GNDS ETCH	B01C2	1-09 *	H	2		P		HAND WIRE	127		
GNDS ETCH	B02C2	1-10 *	H	1		P		HAND WIRE	127		
GNDS ETCH	B03C2	1-11 *	H	2		P		HAND WIRE	127		
GNDS ETCH	B04C2	1-12 *	H	1		P		HAND WIRE	127		
GNDS ETCH	B04T1	1-13 *	H	2		P		HAND WIRE	127		
GNDS ETCH	B03T1	1-14 *	H	1		P		HAND WIRE	127		
GNDS ETCH	B02T1	1-15 *	H	2		P		HAND WIRE	127		
GNDS ETCH	B01T1	1-16 *	H	1		P		HAND WIRE	127		
GNDS ETCH	C01C2	1-17 *	H	2		P		HAND WIRE	127		
GNDS ETCH	C02C2	1-18 *	H	1		P		HAND WIRE	127		
GNDS ETCH	C03C2	1-19 *	H	2		P		HAND WIRE	127		
GNDS ETCH	C04C2	1-20 *	H	1		P		HAND WIRE	127		
GNDS ETCH	C04T1	1-21 *	H	2		P		HAND WIRE	127		
GNDS ETCH	C03T1	1-22 *	H	1		P		HAND WIRE	127		
GNDS ETCH	C02T1	1-23 *	H	2		P		HAND WIRE	127		
GNDS ETCH	C01T1	1-24 *	H	1		P		HAND WIRE	127		
GNDS ETCH	D01C2	1-25 *	H	2		P		HAND WIRE	127		
GNDS ETCH	D02C2	1-26 *	H	1		P		HAND WIRE	127		
GNDS ETCH	D03C2	1-27 *	H	2		P		HAND WIRE	127		
GNDS ETCH	D04C2	1-28 *	H	1		P		HAND WIRE	127		
GNDS ETCH	D04T1	1-29 *	H	2		P		HAND WIRE	127		
GNDS ETCH	D03T1	1-30 *	H	1		P		HAND WIRE	127		
GNDS ETCH	D02T1	1-31 *	H	2		P		HAND WIRE	127		
GNDS ETCH	D01T1	1-32 *	H	1		P		HAND WIRE	127		
GNDS ETCH	E01C2	1-33 *	H	2		P		HAND WIRE	127		
GNDS ETCH	E02C2	1-34 *	H	1		P		HAND WIRE	127		
GNDS ETCH	E03C2	1-35 *	H	2		P		HAND WIRE	127		
GNDS ETCH	E04C2	1-36 *	H	1		P		HAND WIRE	127		
GNDS ETCH	E04T1	1-37 *	H	2		P		HAND WIRE	127		
GNDS ETCH	E03T1	1-38 *	H	1		P		HAND WIRE	127		
GNDS ETCH	E02T1	1-39 *	H	2		P		HAND WIRE	127		
GNDS ETCH	E01T1	1-40 *	H	1		P		HAND WIRE	127		
GNDS ETCH	F01C2	1-41 *	H	2		P		HAND WIRE	127		
GNDS ETCH	F02C2	1-42 *	H	1		P		HAND WIRE	127		
GNDS ETCH	F03C2	1-43 *	H	2		P		HAND WIRE	127		
GNDS ETCH	F04C2	1-44 *	H	1		P		HAND WIRE	127		
GNDS ETCH	F04T1	1-45 *	H	2		P		HAND WIRE	127		
GNDS ETCH	F03T1	1-46 *	H	1		P		HAND WIRE	127		
GNDS ETCH	F02T1	1-47 *	H	2		P		HAND WIRE	127		
GNDS ETCH	F01T1	1-48 *	H	1		P		H TO WHERE	127		
		1									

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VT11.A		WRP288.V22(22) 11/06/73										1-JUN-74	317	PAGE 16		
RUN NAME		A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
LEI EDGE		H	E02F2		1-01 *											128
LEI EDGE		H	E04J2		1-02 *											128
LEI EDGE					1									4-2/8		128
LEI L.P. FLAG (0)		H	A04V2		1-01 *											129
LEI L.P. FLAG (0)		H	C02E1		1-02 *								J-1			129
LEI L.P. FLAG (0)					1									8-0/8		129
LEI LP INT HIT		H	A02B2		1-01 *											130
LEI LP INT HIT		H	A04R1		1-02 *											130
LEI LP INT HIT					1									5-2/8		130
LEI Z AXIS		H	A04K2		1-01 *											131
LEI Z AXIS		H	B02M2		1-02 *											131
LEI Z AXIS					1									7-0/8		131
LSC ENABLE PRINT		H	F02M2		1-01 *											132
LSC ENABLE PRINT		H	F04S2		1-02 *											132
LSC ENABLE PRINT					1									4-4/8		132
MC L.P. PULSE		L	A02A1		1-01 *											133
MC L.P. PULSE			A03P2		1-02 *											133
MC L.P. PULSE					1									5-2/8		133
MC Y<X		H	E02H2		1-01 *											134
MC Y<X		H	F03T2		1-02 *											134
MC Y<X					1									7-4/8		134
MC Y=X		H	E02K2		1-01 *											135
MC Y=X		H	E03S1		1-02 *											135
MC Y=X					1									4-0/8		135
MC Y>X		H	E02L2		1-01 *											136
MC Y>X		H	E03U1		1-02 *											136
MC Y>X					1									4-0/8		136
MD GRAPH X		H	B04S1		1-01 *											137
MD GRAPH X		H	F02V2		1-02 *											137
MD GRAPH X					1									14-4/8		137
MD GRAPH Y		H	B04R2		1-01 *											138
MD GRAPH Y		H	E02B2		1-02 *											138
MD GRAPH Y					1									10-2/8		138
MD JUMP LOAD PULSE		H	A02J2		1-01 *											139
MD JUMP LOAD PULSE		H	C04D1		1-02 *											139
MD JUMP LOAD PULSE					1									8-4/8		139

VT11.A		WRP288.V22(22) 11/06/73										1-JUN-74	317	PAGE 17		
RUN NAME		A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
MD PC+2L		L	A02U2		1-01 *											140
MD PC+2L		L	E04N1		1-02 *											140
MD PC+2L					1									13-6/8		140
MD POINT		L	A02S2		1-01 *											141
MD POINT		L	A04S2		1-02 *											141
MD POINT					1									4-0/8		141
MD PT+REL PT		H	A02B1		1-01 *											142
MD PT+REL PT		H	A04U2		1-02 *											142
MD PT+REL PT					1									5-3/8		142
PCC ANALOG CLOCK		H	F02U1		1-01 *	H										143
PCC ANALOG CLOCK		H	F03R1		1-02 *	H										143
PCC ANALOG CLOCK					1									3-6/8	HAND WIRE H TO WHERE	143
PCC ANALOG EDGE		L	F02P1		1-01 *											144
PCC ANALOG EDGE		L	F03U1		1-02 *											144
PCC ANALOG EDGE					1									3-6/8		144
PCC DIS 01 IN		H	D03U1		1-01 *											145
PCC DIS 01 IN		H	E02T2		1-02 *											145
PCC DIS 01 IN					1									5-4/8		145
PCC DIS 02 IN		H	E03F2		1-01 *	1										146
PCC DIS 02 IN		H	F02R1		1-02 *											146
PCC DIS 02 IN					1									7-4/8		146
PCC DIS 03 IN		H	E03J2		1-01 *											147
PCC DIS 03 IN		H	F02S1		1-02 *											147
PCC DIS 03 IN					1									7-4/8		147
PCC DIS 04 IN		H	E03F1		1-01 *											148
PCC DIS 04 IN		H	F02J2		1-02 *											148
PCC DIS 04 IN					1									6-2/8		148
PCC DIS CLK		H	C04F2		1-01 *	H										149
PCC DIS CLK		H	D02M2		1-02 *	H										149
PCC DIS CLK					1									7-4/8	HAND WIRE H TO WHERE	149
PCC PC 01		H	A02R2		1-01 *											150
PCC PC 01		H	F04M2		1-02 *											150
PCC PC 01					1									17-0/8		150
PCC PC 02		H	A02S1		1-01 *											151
PCC PC 02		H	F04P1		1-02 *											151
PCC PC 02					1									17-0/8		151

VT11.A
RUN NAME

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A/P PIN ORDER BAY -
NAME PIN ORDER

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LENGTH EXCEPTIONS RUN
NUMBER

A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE 18 RUN NUMBER
PCC PC 03	H	A02T2	1-01 *							1				152
PCC PC 03	H	F04R1	1-02 *											152
PCC PC 03			1									10-6/8		152
PCC PC 04	H	A02V1	1-01 *							1				153
PCC PC 04	H	E04K2	1-02 *											153
PCC PC 04			1									13-4/8		153
PCC PC 05	H	B02K1	1-01 *							1				154
PCC PC 05	H	E04L1	1-02 *											154
PCC PC 05			1									12-0/8		154
PCC PC 06	H	B02L1	1-01 *							1				155
PCC PC 06	H	F04D1	1-02 *											155
PCC PC 06			1									13-6/8		155
PCC PC 07	H	B02J1	1-01 *							1				156
PCC PC 07	H	E04S2	1-02 *											156
PCC PC 07			1									12-0/8		156
PCC PC 08	H	B02H1	1-01 *							1				157
PCC PC 08	H	F04D2	1-02 *											157
PCC PC 08			1									14-4/8		157
PCC PC 09	H	C02K1	1-01 *							1				158
PCC PC 09	H	E04R1	1-02 *											158
PCC PC 09			1									10-0/8		158
PCC PC 10	H	C02J1	1-01 *							1				159
PCC PC 10	H	D04U2	1-02 *											159
PCC PC 10			1									8-0/8		159
PCC PC 11	H	C02H1	1-01 *							1				160
PCC PC 11	H	D04S1	1-02 *											160
PCC PC 11			1									7-6/8		160
PCC PC 12	H	C02F1	1-01 *	1						1		3-3		161
PCC PC 12	H	D04U1	1-02 *											161
PCC PC 12			1									8-0/8		161
PCC PC 13	H	D02M1	1-01 *							1				162
PCC PC 13	H	D04R1	1-02 *											162
PCC PC 13			1									4-4/8		162
PCC PC 14	H	D02L1	1-01 *							1				163
PCC PC 14	H	E04F2	1-02 *											163
PCC PC 14			1									5-5/8		163

VT11.A
RUN NAME

WRP288.V22(22) 11/06/73
A/P PIN ORDER BAY -
NAME PIN ORDER

1-JUN-74 317 PAGE 19
LENGTH EXCEPTIONS RUN
NUMBER

A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW	RV	PG	Y	X	Z	REMARKS	1-JUN-74 LENGTH	317 EXCEPTIONS	PAGE 19 RUN NUMBER
PCC PC 15	H	D02K2	1-01 *							1				164
PCC PC 15	H	E04B1	1-02 *											164
PCC PC 15			1									5-4/8		164
PR X00	H	C03R2	1-01 *	1						1		4-7		165
PR X00	H	F04M1	1-02 *											165
PR X00			1									10-6/8		165
PR X01	H	C03S2	1-01 *							1				166
PR X01	H	F04K1	1-02 *											166
PR X01			1									10-4/8		166
PR X02	H	C03T2	1-01 *							1				167
PR X02	H	F04J1	1-02 *											167
PR X02			1									10-2/8		167
PR X03	H	C03U2	1-01 *	1						1		4-6		168
PR X03	H	F04M2	1-02 *											168
PR X03			1									10-6/8		168
PR X04	H	C03V2	1-01 *	1						1		3-2		169
PR X04	H	E04K1	1-02 *											169
PR X04			1									7-2/8		169
PR X05	H	D03B2	1-01 *							1				170
PR X05	H	E04A1	1-02 *											170
PR X05			1									5-4/8		170
PR X06	H	D03J2	1-01 *	1						1		3-3		171
PR X06	H	F04A1	1-02 *											171
PR X06			1									7-4/8		171
PR X07	H	D03H2	1-01 *							1				172
PR X07	H	E04U1	1-02 *											172
PR X07			1									7-0/8		172
PR X08	H	D03T2	1-01 *							1				173
PR X08	H	F04B1	1-02 *											173
PR X08			1									6-6/8		173
PR X09	H	D03C1	1-01 *							1				174
PR X09	H	E04U2	1-02 *											174
PR X09			1									8-0/8		174
PR X10	H	D03R1	1-01 *							1				175
PR X10	H	F02E1	1-02 *											175
PR X10			1									7-6/8		175

VT11.A
RUN NAME

WRP288.V22(22) 11/06/73
A/P PIN ORDER BAY -
NAME PIN ORDER

Q DRAW RV PG Y X Z

REMARKS

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LENGTH

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EXCEPTIONS

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RUN
NUMBER

SDM DELTA Y07
SDM DELTA Y07
SDM DELTA Y07

SDM DELTA Y08
SDM DELTA Y08
SDM DELTA Y08

SDM DELTA Y09
SDM DELTA Y09
SDM DELTA Y09

SDM STATUS 00
SDM STATUS 00
SDM STATUS 00

SDM STATUS 01
SDM STATUS 01
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SDM STATUS 02
SDM STATUS 02
SDM STATUS 02

SDM STATUS 03
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SDM STATUS 07
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SDM STATUS 08
SDM STATUS 08
SDM STATUS 08

H C04P2 1-01 *
H F03F2 1-02 *
1

H D04P1 1-01 *
H F03E2 1-02 *
1

H D04J2 1-01 *
H F03D2 1-02 *
1

H B02A1 1-01 *
H F04P2 1-02 *
1

H B02C1 1-01 *
H F04M1 1-02 *
1

H B02F1 1-01 *
H F04N2 1-02 *
1

H B02D1 1-01 *
H F04S1 1-02 *
1

H B02U1 1-01 *
H E04L2 1-02 *
1

H B02V1 1-01 *
H E04M1 1-02 *
1

H C02D1 1-01 *
H F04E1 1-02 *
1

H C02A1 1-01 *
H F04H1 1-02 *
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H C02P2 1-01 *
H F04E2 1-02 *
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10-4/8

7-6/8

8-2/8

16-2/8

15-6/8

15-6/8

15-6/8

11-2/8

10-6/8

12-0/8

12-6/8

11-0/8

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VT11.A
RUN NAME

WRP288.V22(22) 11/06/73
A/P PIN ORDER BAY -
NAME PIN ORDER

Q DRAW RV PG Y X Z

REMARKS

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317
EXCEPTIONS

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RUN
NUMBER

SDM STATUS 09
SDM STATUS 09
SDM STATUS 09

SDM STATUS 10
SDM STATUS 10
SDM STATUS 10

SDM STATUS 11
SDM STATUS 11
SDM STATUS 11

SDM STATUS 12
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SDM STATUS 15
SDM STATUS 15
SDM STATUS 15

TD LOAD PULSE
TD LOAD PULSE
TD LOAD PULSE

TD N.P.R. REQ (0)
TD N.P.R. REQ (0)
TD N.P.R. REQ (0)

VC1 CHAR+GRAPH MODE
VC1 CHAR+GRAPH MODE
VC1 CHAR+GRAPH MODE

VC1 CLR DELTA REG
VC1 CLR DELTA REG
VC1 CLR DELTA REG

VC1 CLR FLAGS
VC1 CLR FLAGS
VC1 CLR FLAGS

H C02T2 1-01 *
H F04C1 1-02 *
1

H C02U2 1-01 *
H D04V2 1-02 *
1

H C02M2 1-01 *
H D04T2 1-02 *
1

H D04V1 1-01 *
H E02C1 1-02 *
1

H D04S2 1-01 *
H E02B1 1-02 *
1

H D02U1 1-01 *
H E04H2 1-02 *
1

H E02A1 1-01 *
H E04D1 1-02 *
1

H A04N2 1-01 *
H B02U2 1-02 *
1

H A04E1 1-01 *
H F02K2 1-02 *
1

H E02U1 1-01 *
H F03E1 1-02 *
1

L C02V2 1-01 *
L F03S2 1-02 *
1

L A02N2 1-01 *
L B04B1 1-02 *
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7-4/8

4-5/8

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4-7/8

4-4/8

7-4/8

18-0/8

4-6/8

11-0/8

5-2/8

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VT11.A		WRP288.V22(22) 11/06/73				1-JUN-74		3:7		PAGE 26		
RUN NAME	A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW RV PG Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
VC1 COUNT CLK		E02P1		1-01 *				1				248
VC1 COUNT CLK		F03L1		1-02 *								248
VC1 COUNT CLK				1						6-0/8		248
VC1 ENABLE	L	D02J2		1-01 *				1				249
VC1 ENABLE	L	F03P1		1-02 *								249
VC1 ENABLE				1						9-0/8		249
VC1 LOAD DAC	H	C02R2		1-01 *				1				250
VC1 LOAD DAC	H	D03D2		1-02 *								250
VC1 LOAD DAC				1						5-0/8		250
VC1 LOAD DOWN COUNT	L	E02U2		1-01 *				1				251
VC1 LOAD DOWN COUNT	L	E03D1		1-02 *								251
VC1 LOAD DOWN COUNT				1						5-0/8		251
VC1 RESET	L	A02K2		1-01 *				1				252
VC1 RESET	L	A04U1		1-02 *								252
VC1 RESET				1						4-2/8		252
VC1 SHIFT CLK	H	D02E2		1-01 *				1				253
VC1 SHIFT CLK	H	E03P2		1-02 *								253
VC1 SHIFT CLK				1						7-0/8		253
VC1 UNLATCH	H	C02S2		1-01 *				1				254
VC1 UNLATCH	H	C03C1		1-02 *								254
VC1 UNLATCH				1						4-6/8		254
VC2 CLK X DOWN		D03M2		1-01 *				1				255
VC2 CLK X DOWN		E02E2		1-02 *								255
VC2 CLK X DOWN				1						5-2/8		255
VC2 CLK X UP		D03J1		1-01 *				1				256
VC2 CLK X UP		E02N1		1-02 *								256
VC2 CLK X UP				1						6-4/8		256
VC2 CLK Y DOWN		D02V2		1-01 *				1				257
VC2 CLK Y DOWN		D03E2		1-02 *								257
VC2 CLK Y DOWN				1						5-0/8		257
VC2 CLK Y UP		D03E1		1-01 *				1				258
VC2 CLK Y UP		F02V1		1-02 *								258
VC2 CLK Y UP				1						10-2/8		258

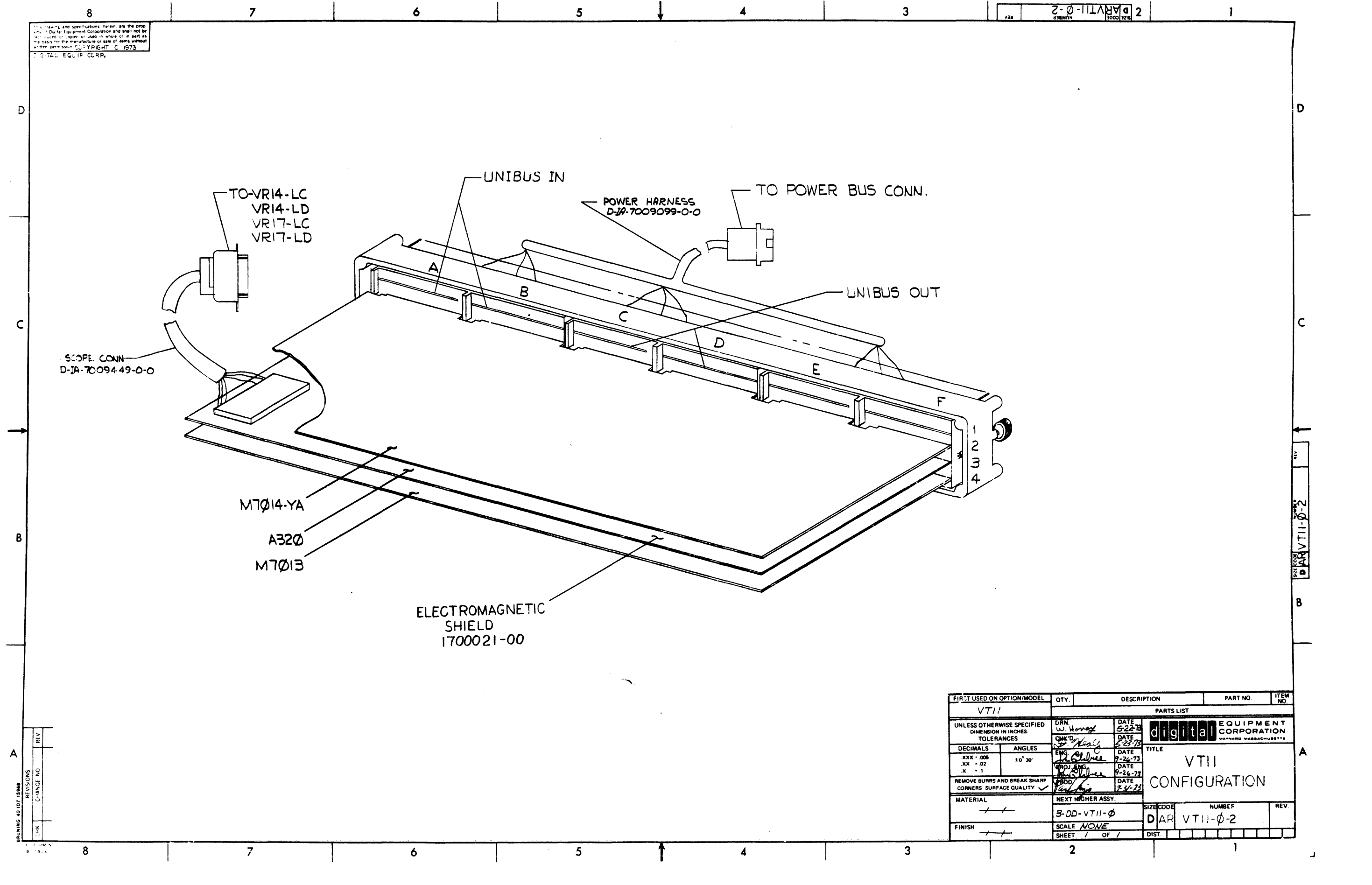
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RUN NAME	A/P	PIN NAME	ORDER PIN	BAY - ORDER	Q	DRAW RV PG Y	X	Z	REMARKS	LENGTH	EXCEPTIONS	RUN NUMBER
VC2 DOWN COUNT CLK	L	A04N1		1-01 *				2				259
VC2 DOWN COUNT CLK	L	E03E2		1-02 *				1				259
VC2 DOWN COUNT CLK	L	E02J2		1-03 *								259
VC2 DOWN COUNT CLK				1						15-7/8		259
VC2 VEC GEN OP DONE		A04F2		1-01 *				1				260
VC2 VEC GEN OP DONE		B02R1		1-02 *								260
VC2 VEC GEN OP DONE				1						8-0/8		260
VR ANALOG +15V		A03D2									1-PIN RUN	261
VR ANALOG -15V		A04E2									1-PIN RUN	262
VR INTENSITY ENA	H	A03B2		1-01 *				2				263
VR INTENSITY ENA	H	A04J2		1-02 *				1				263
VR INTENSITY ENA	H	F03J1		1-03 *								263
VR INTENSITY ENA				1						20-7/8		263

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2-0-11111111 2



REV	CHANGE NO

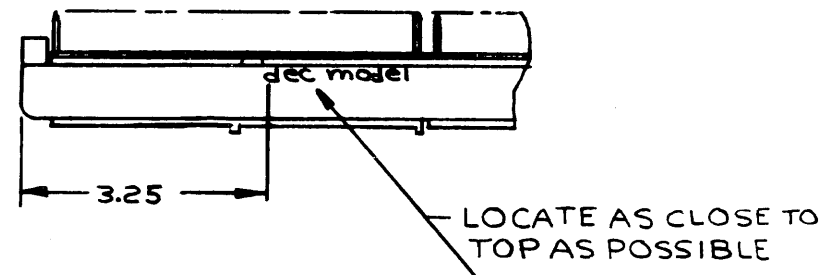
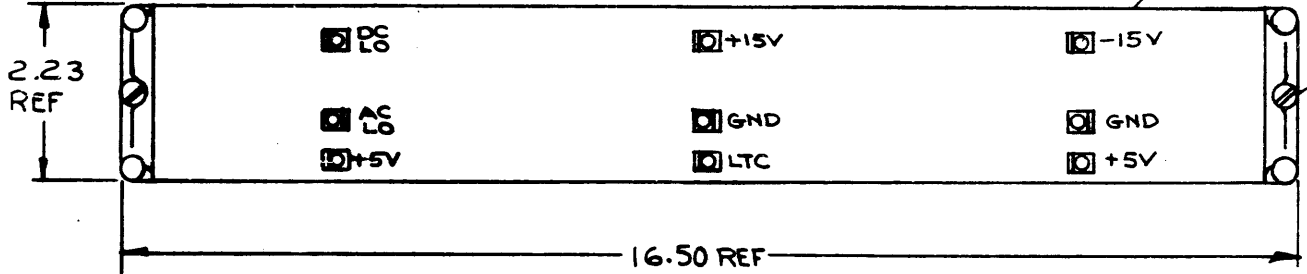
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VTII		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN W. Worell	DATE 5-22-73	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS .XXX ± .008	CHK'D S. Neal	DATE 5-23-73	TITLE VTII CONFIGURATION	
ANGLES X - 1 ± 0° 30'	ENG R. Palmer	DATE 7-26-73		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DRP'G R. Palmer	DATE 7-26-73		
MATERIAL	FINISH	NEXT HIGHER ASSY.	SIZE CODE	NUMBER
++	++	B-DD-VTII-Ø	DAR	VTII-Ø-2
SCALE MOVE		SHEET 1 OF 1	DIST.	REV.

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DIGITAL EQUIP CORP

WIRE TABLE

ITEM NO	SIGNAL NAME	FROM PIN	TO PIN	COLOR	AWG	ITEM NO	SIGNAL NAME	FROM PIN	TO PIN	COLOR	AWG
3	+15 V	D02R2	F03R2	ORN	#24	7	GND	A03C1	A03C2	BLK	#24
		D02R2	WIRE WRAP PIN AT +15V LUG	ORN	#24	7	GND	A02E2	A02C2	BLK	#24
6	ANALOG CLK	F03R1	F02U1	WHT	#30	7	GND	B02B2	A02T1	BLK	#24
		GND	F03T1	F02T1	BLK	TWP	7	GND	C02B2	C02C2	BLK
6	INTENSITY	A03T2	B04L2	WHT	#30	7	GND	C02C2	C02N2	BLK	#24
		GND	A03T1	B04T1	BLK	TWP	5	PWR SUPPLY L INT CLK	A04A1	WIRE WRAP PIN AT LTC LUG	YEL
6	DISCLK	C04F2	D02N2	WHT	#30						
		GND	C04C2	D02T1	BLK	TWP					
5	BUS AC LO	B01F1	WIRE WRAP PIN AT AC LO LUG	YEL	#30						
5	BUS DC LO	B01F2	WIRE WRAP PIN AT DC LO LUG	YEL	#30						



REV. A	CHANGE NO. 0004
CHK 88	VTII - 0004
E. REMOND 5-5-73	
J. ELSBREE	
P. McCallum 5-16-73	

REF	AWT	REVISION	STATUS	AWT-7009450-0	9
A/R		LOGIC SERIAL NO.	LABELS	A-SS-7407846-00	8
A/R		#24 AWG, BLK, SOLID CONL		9107688-00	7
A/R		#30 AWG, BLK/WHT, TWP		9107720-09	6
A/R		#30 AWG, YEL, SOLID COND		9105740-44	5
REF		WIRE LIST (VTII)		K-WL-VTII-0-1	4
A/R		#24 AWG, ORN, SOLID COND		9107688-33	3
2		SCREW CAPTIVE #8-32x1-7/8		9008157	2
1		BACK PLANE ASSY		D-2A-70091520-0	1

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VTII				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN. <i>D. Neely</i> DATE 4/29/73	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS .XXX - .005 .XX - .02 .X - .1	ANGLES ±0° 30'	CHK'D <i>P.S. (Sland)</i> DATE 8/6/73	TITLE WIRED ASSY (VTII)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓		ENG. <i>J. Chelver</i> DATE 9/6/73	NUMBER C IA 7009450-0-0	
MATERIAL ———		PROJ. ENG. <i>John Chelver</i> DATE 9/1/73	REV. A	
FINISH ———		PROD. <i>Paul Tim</i> DATE 9-6-73	SIZE CODE	
NEXT HIGHER ASSY. A-PL-VTII-0-0		SCALE NONE		DIST.
SHEET 1 OF 1				


REV. A
C IA 7009450-0-0

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DRAWING NUMBER	INIT	AUTOMATIC WIRE TESTER (AWT) REVISION STATUS																REV	
	REL	TO	A																
K-WL-VT11-0-1	A	A																	
C-IA-7009450-0-0	*	A																	
D-CS-5410094-0-1	-	D																	

NUMBER 7009450-0
 SIZE CODE A WT

REVISIONS	REV.	A
	CHANGE NO.	VT11-00004
CHK	ORIGINATED	

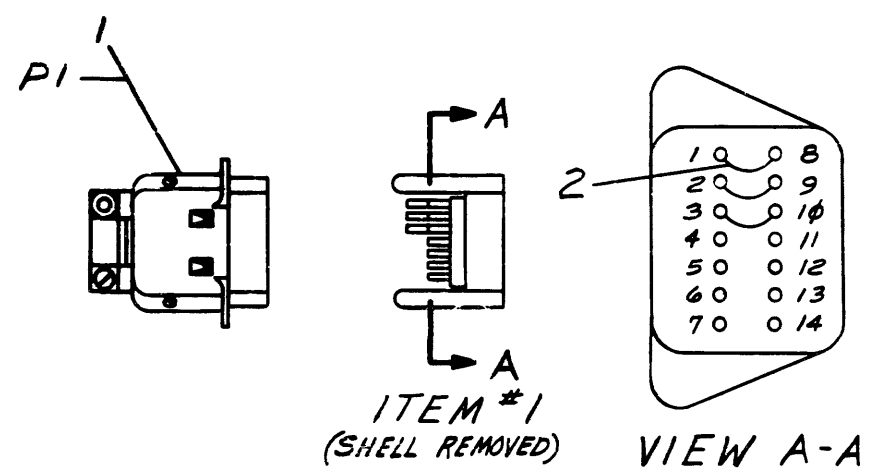
DRN. <i>E. REMOND</i>	DATE 5-5-75	 EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. <i>L. Gilbert</i>	DATE 5-6-75	
ENG. J. ELSBREE	DATE 5-16-75	TITLE VT11 AWT REVISION STATUS
PROJ. ENG. J. ELSBREE	DATE 5-16-75	
PROD. J. ELSBREE	DATE 5-16-75	
FIRST USED ON VT11	SCALE —	SIZE CODE A WT
SHEET 1 OF 1	DIST	NUMBER 7009450-0 REV A

DRA 123

DEC 13 1975 11 007 M174

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WIRE TABLE						
ITEM NO.	DESCRIPTION		FROM		TO	
	AWG	COLOR	CONNECTION	WITH	CONNECTION	WITH
2	24	RED	PI-1	SOL.	PI-8	SOL.
2	24	RED	PI-2	SOL.	PI-9	SOL.
2	24	RED	PI-3	SOL.	PI-10	SOL.



REV.	CHANGE NO.	CHK	DATE
A	7009248-00001	P.M.	6-5-73
			6-14-73

Ernie A. D. CRA BBE

WIRE	WIRE #24AWG. STRD. RED	9107450-22	2
1	CONN. AMP. 57-30140	1205713	1
PARTS LIST			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
GT40			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN. <i>[Signature]</i> DATE 1-22-73	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE CABLE, KEYBD. INTERLOCK
DECIMALS	ANGLES	CHKD. <i>[Signature]</i> DATE 1-25-73	
.XX = .005	±0° 30'	ENG. <i>[Signature]</i> DATE 2-2-73	
.XX = .02		PRD. ENG. <i>[Signature]</i> DATE 2-2-73	
.X = .1		PROD. <i>[Signature]</i> DATE 2-5-73	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	✓	NEXT HIGHER ASSY.	
MATERIAL		A-PL-GT40-0-0	SIZE CODE
FINISH		SCALE NONE	NUMBER
		SHEET / OF /	7009248-0-0
			REV. A

REV. A
 NUMBER 7009248-0-0
 SIZE CODE C IA

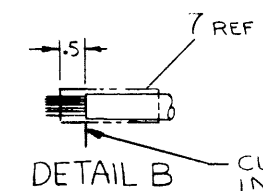
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WIRE LIST								
ITEM NO	DESCRIPTION	FROM CONNECTION	WITH ITEM	TO CONNECTION	WITH ITEM	CUT POINT	SIGNAL NAME	
1	RED	P1-2	5*	P2-R	3	7A	INT 0	
	BLK	P1-3	5*	P2-T	3	9A	INT 1	
	DRAIN	SEE NOTE #4	5	P2-S	3	8A	GND	
2	WHT	P1-4	5*	P2-JJ	3	14A	-X INPUT	
	BLK	P1-5	5*	P2-HH	3	13A	GND	
	DRAIN	SEE NOTE #4	5	P2-KK	3	15A	GND	
3	GRN	P1-7	5*	P2-J	3	4A	-X INPUT	
	BLK	P1-8	5*	P2-L	3	5A	+X INPUT	
	DRAIN	P1-9	5*	P2-M	3	6A	GND	
4	BLU	P1-10	5*	P2-B	3	1A	-Y INPUT	
	BLK	P1-11	5*	P2-D	3	2A	+Y INPUT	
	DRAIN	P1-12	5*	P2-E	3	3A	GND	
7	ORN	P1-19	5*	P2-X	3	10A	LIGHT PEN	
	BLK	NOT USED						
	DRAIN	SEE NOTE #4	5	P2-Y	3	11A	GND	
8	WHT	P1-1	5*	P2-DD	3	12A	INT 2	
	RED	P1-22	5*	P2-LL	3	16A	+22V	
	DRAIN	SEE NOTE #4	5	P2-PP	3	18A	GND	
9	GRN	P1-23	5*	P2-NN	3	17A	H.Q. GND	
	RED	P1-24	5*	P2-RR	3	19A	-22V	
	DRAIN	SEE NOTE #4	5	P2-UU	3	20A	GND	

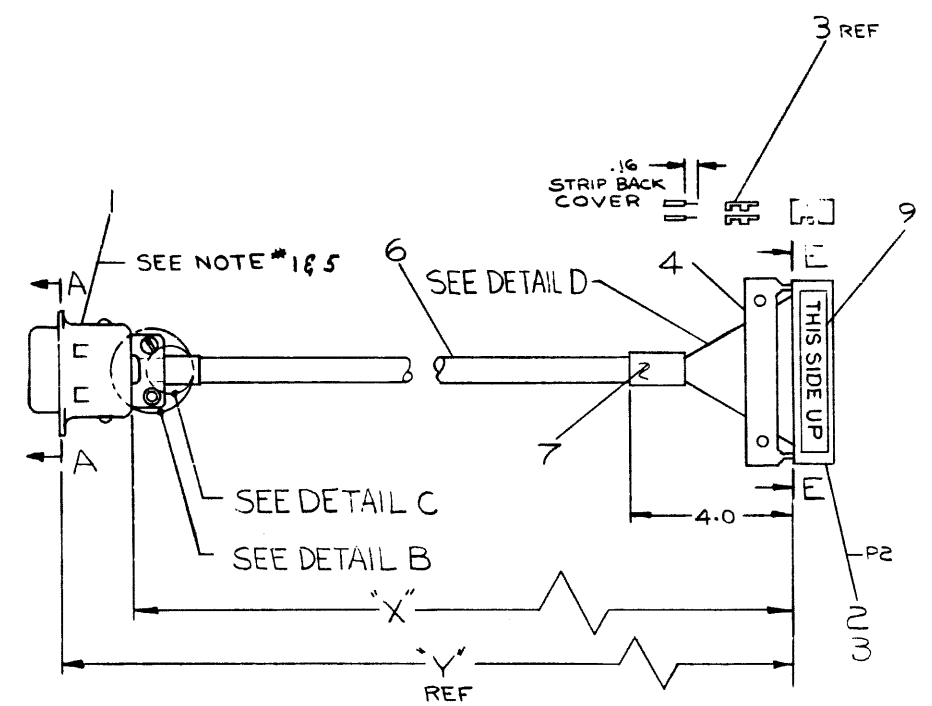
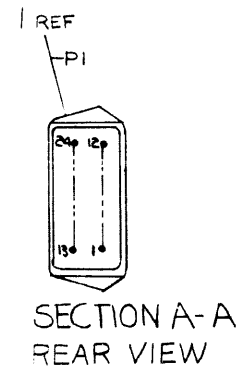
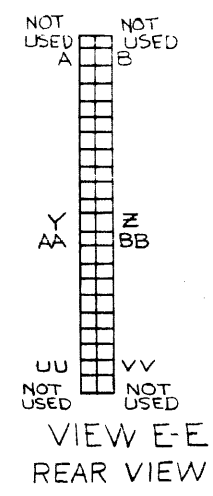
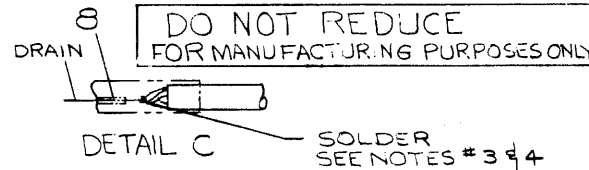
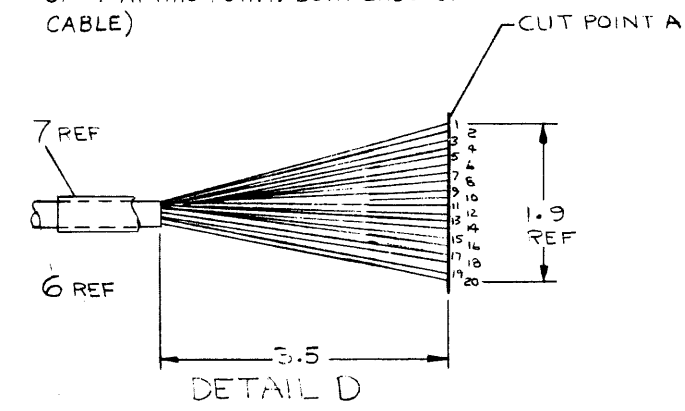
* INDICATES SOLDER

LEGEND		
VARIATION		
NL #BER	DIM. X	DIM Y (PRE CUT)
7009449-10	10 FT. 0.1 IN ± 2 IN	10 FT. 1 IN
7009449-15	15 FT. 0.1 IN ± 3 IN	15 FT. 1 IN
7009449-20	20 FT. 0.1 IN ± 3 IN	20 FT. 1 IN

- NOTES:
- CLEAR TUBING (ITEM #5) TO BE USED ON ALL P1 PINS (ITEM #1).
 - MANUFACTURING SHOULD USE MACHINE CRIMPER TOOL FOR CRIMPING PINS (ITEM #3) MUST BE HT66/HT68 FROM BERG OR EQUIV.
 - ALL EXPOSED DRAIN WIRES TO HAVE CLEAR TUBING (ITEM #8) ADDED BEFORE SOLDERING.
 - DRAINS FROM PAIRS #1, 2, 7, 8 & 9 ARE TO BE TIED TOGETHER AND ONE LEAD SOLDERED TO P1-6 SEE DETAIL "C"
 - STRIP CABLE COVER BACK .75" AT PI END. SLIT CABLE COVER BACK 1" FROM THIS POINT SUCH THAT COVERING MAY BE FOLDED BACK WHILE SOLDERING WIRES TO P1. AFTER WIRES ARE SOLDERED, THE CABLE COVER SHOULD BE UNFOLDED AND ITEM #7 POSITIONED AS PER DETAIL B. WHEN P1 IS COMPLETELY ASSEMBLED, CABLE COVER MUST BE BETWEEN ITEM #7 AND STRAIN RELIEF OF P1.



DETAIL B - CUT LINE FOR WIRES DESCRIBED IN TABLE (CUT BACK PAIR #5 & 6 AND BLACK OF #7 AT THIS POINT. BOTH ENDS OF CABLE)



REV	DATE	BY	CHKD
1	12-15-73	JL	JL
2	1-8-74	JL	JL
3	1-23-74	JL	JL
4	1-23-74	JL	JL
5	1-23-74	JL	JL

FIRST USED ON OPTION / MODEL VT11	DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DATE 4-25-73
TOLERANCES DECIMALS .xxx ± .005 .xx ± .02 .x ± .1	TOLERANCES ANGLES ± 0°30' FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS	DATE 4-25-73
MATERIAL SEE PARTS LIST	DATE 9-6-73	DATE 9-6-73
FINISH	DATE 9-6-73	DATE 9-6-73


QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	LABEL, THIS SIDE UP	3611567	9
1	TUBING, WHITE SHRINK 1/8 I.D.	9107253-09	9
1	TUBING #18 CLEAR	9107258-10	8
1	TUBING, BLK SHRINK 3/4 I.D.	9107250-20	7
1	CABLE, 18 COND	9107687	6
1	TUBING #12 CLEAR	9107301-10	5
1	STRAIN RELIEF - 40 COND	1211166	4
20	SOCKET, CRIMP	1210089-4	3
1	HOUSING, 40 PIN	1210918-15	2
1	CONN 24 PIN	1203466	1

PARTS LIST		digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
TITLE SCOPE CONNECTOR CABLE		SIZE CODE DIA	NUMBER 7009449-0-0
SCALE NONE		REV B	
SHEET 1 OF 1			

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS														REMARKS					
1	B	C	D	E	F	G	H													(VG)
2	B	C	D	E	F	G	H													(CSG)
3	B	C	D	E	F	G	H													(VR)
4	B	C	D	E	F	G	H													(BRM)
5	B	C	D	E	F	G	H													(MC)
6	B	C	D	E	F	G	H													(DCR)
7	B	C	D	E	F	G	H													(PR)
8	B	C	D	E	F	G	H													(DAC)
9	B	C	D	E	F	G	H													
10	B	C	D	E	F	G	H													
11	B	C	D	E	F	G	H													

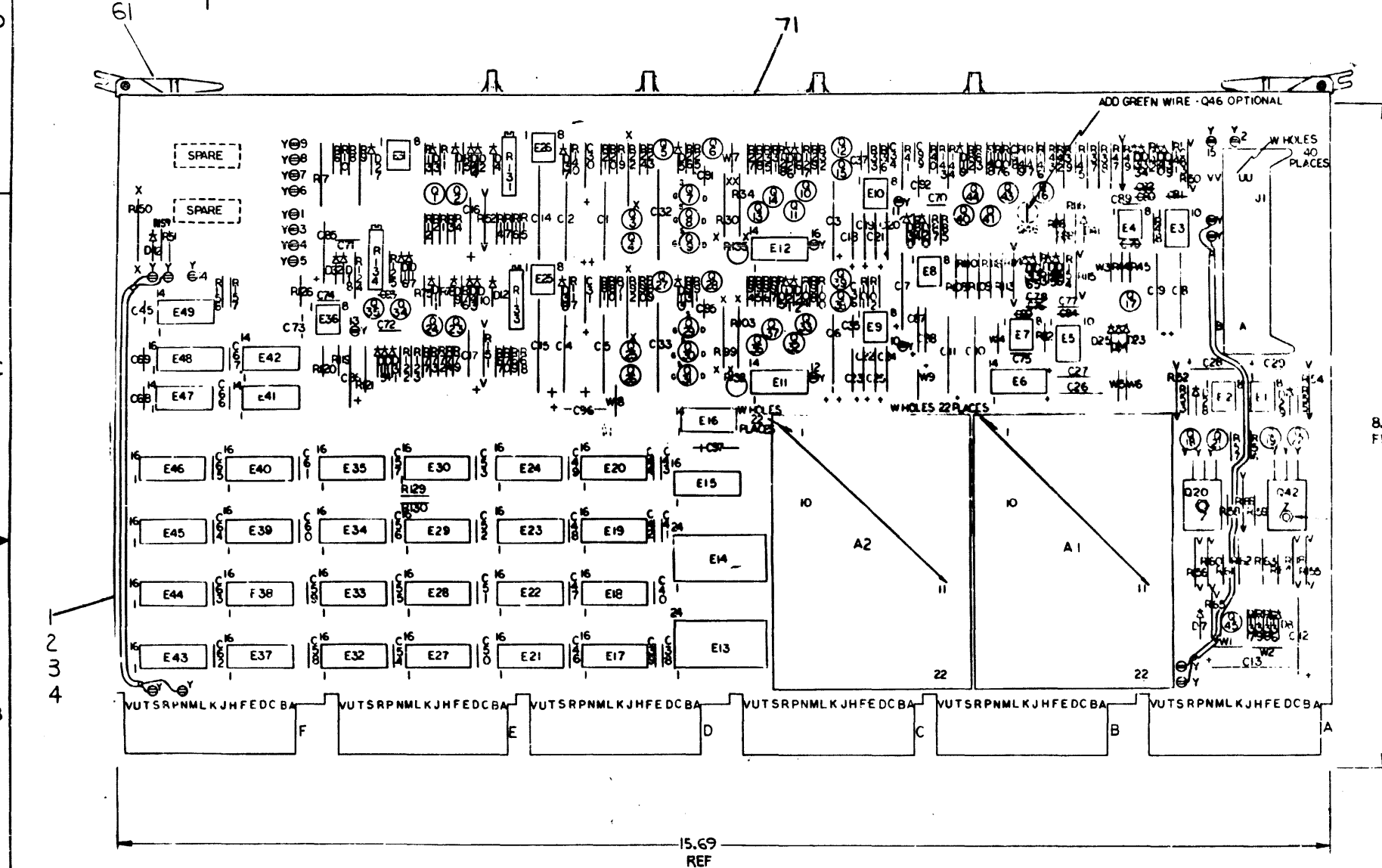
DATE	ENG.	ETCH REV.	ECO NO.
3-9-73	HEP	C	00001
2-17-73	HEP	D	00002 & 2A
4-5-73	HEP	E	00004
3-5-73	HEP	E	00005
8-11-75	HEP	E	00006

DRN. <i>S. Asat</i> CHK'D. <i>[Signature]</i> ENG. <i>[Signature]</i> PROJ. ENG. <i>[Signature]</i> PROD. <i>[Signature]</i>		DATE DATE DATE DATE DATE	 TITLE VT40 DISPLAY GENERATOR							
NEXT HIGHER ASSY. B-DD-VT40-0										
SCALE <i>1/1</i> SHEET 1 OF 11		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>SIZE</th> <th>CODE</th> <th>NUMBER</th> <th>RFV</th> </tr> <tr> <td>B</td> <td>CS</td> <td>A320-0-1</td> <td>H</td> </tr> </table>	SIZE	CODE	NUMBER	RFV	B	CS	A320-0-1	H
SIZE	CODE	NUMBER	RFV							
B	CS	A320-0-1	H							

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NOTES:



7496	12	5
7497	8	16
7493	8	16
7476	13	5
74191	8	16
7485	8	16
IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.		
IC PIN LOCATIONS		

REF	X-Y COORDINATE HOLE LOCATION	K-CO-A320-B-4	1
REF	ASSY/DRILLING HOLE LAYOUT	D-AH-A320-B-5	2
REF	MODULE ECO HISTORY	B-MH-A320-B-6	3
1	ETCHED CKT BD	5010099	4
2	C34, C35 CAP 27PF 100V 5% DM	1001730	5
2	C36, C37 CAP 47PF 100V 5% DM	1000011	6
2	C81, C95 CAP 330PF 100V 5% DM	1000023	7
2	C14, C15 CAP .22UF 100V 10% WYLAR	1000037	8
2	C32, C33 CAP .02UF 50V 5% POLY	1000004	9
1	C98 CAP 10PF 100V 5% DM	1000008	10
1	C99 CAP 270PF 100V 5% DM	1000022	12
13	C1 THRU C13 CAP 100UF 20V 10% TANT	1004815	13
47	C38 THRU C84 CAP .01UF 50V 20% ANI ML	1001810	14
18	C16 THRU C29, C87, C88, C96, C97 CAP 1UF 35V 10% TANT	1001776	15
2	C89, C90 CAP 100PF 100V 5% DM	1000016	16
2	C85, C86 CAP 6.8UF 35V 10% TANT	1005306	17
2	C82, C93 CAP 1000PF 100V 5% DM	1000042	18
2	C30, C31 CAP 15UF 20V 10% TANT	1004812	19
2	D43, D44 DIODE IN753A	1102421	20
3	D39, D40, D46 DIODE IN746A 3.3V ZENER	1104860	21
3	D41, D42, D23 DIODE 1A21 5 1V 1% 1% 1%	1105871	22
2	D28, D29 DIODE IN825	1101385	23
22	D5, D6, D13, D26, D39, D38 DIODE D884	1100114	24
8	D1, D4, D9, D12 DIODE DEC777	1103041	25
2	D7, D8 DIODE IN4004	1103792	26
2	D31, D32 DIODE IN752A	1102808	27
1	J1 CONNECTOR RT. ANG. HEADER	1209841	28
2	A1, A2 12 BIT DAC	A6000 OR .000YA	29
2	R151, R152 RESISTOR 270 $\frac{1}{8}$ W 5%	1300285	30
1	R150 RESISTOR 180 $\frac{1}{8}$ W 5%	1300262	31
1	R137 RESISTOR 1.5K $\frac{1}{8}$ W 5%	1300391	32
10	R6, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45 RESISTOR 1K 1/8W 1% MF	1304885	33
1	R130 RESISTOR 330 $\frac{1}{8}$ W 10%	1300293	34
1	R129 RESISTOR 750 $\frac{1}{8}$ W 5%	1301401	35
1	R118 RESISTOR 484K 1/8W 1% MF	1303043	36
2	R12, R125 RESISTOR 4.84K 1/8W 1% MF	1301802	37
2	R3, R74 RESISTOR 2.7K $\frac{1}{8}$ W 5%	1300426	38
2	R11, R78 RESISTOR 68 $\frac{1}{8}$ W 5%	1300219	39
8	R57, R58, R59, R67, R68, R69, R70, R71, R72, R73, R74, R75 RESISTOR 2K 1/8W 1% MF	1303353	40
2	R38, R109 RESISTOR 422 1/8W 1% MF	1303067	41
14	R1, R2, R12, R24, R72, R73, R77, R80, R27, R31, R94, R96, R45, R46 RESISTOR 470 $\frac{1}{8}$ W 5%	1300318	42
17	R13, R23, R25, R89, R91, R28, R128, R29, R127, R95, R97, R98, R104, R44, R147, R146, R75 RESISTOR 270 $\frac{1}{8}$ W 5%	1301972	43
1	R43 RESISTOR 562 $\frac{1}{8}$ W 1% MF	1304893	44
3	R84, R121, R124 RESISTOR 562 $\frac{1}{8}$ W 1% MF	1305769	45
2	R85, R122 RESISTOR 2.74K 1/8W 1% MF	1304888	46
1	R123 RESISTOR 6.8K $\frac{1}{8}$ W 5%	1301423	48
2	R65, R66 RESISTOR 1K $\frac{1}{8}$ W 5%	1300364	49
2	R62, R83 RESISTOR 7K 1/8W 1% MF	1300355	50
8	R56, R59, R138, R139, R140, R117 RESISTOR 2.2K $\frac{1}{8}$ W 5%	1300417	51

FIRST USED ON OPTION MODEL
 VT40

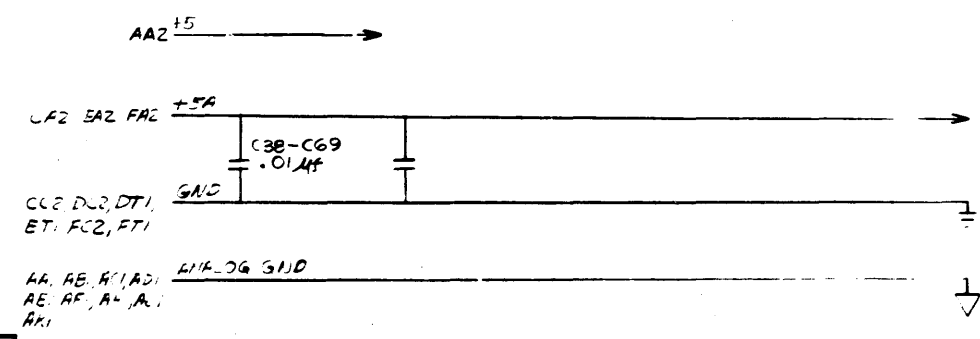
REV	CHANGE NO	REVISIONS	DATE	BY
1		IN4001 MR-2064	5/15/72	S. R. White
2		FD777 SAME	6/1/72	A. J. White
3		D664 IN3606	6/1/72	A. J. White
4		IN825 SAME	6/1/72	A. J. White
5		1/4MS.1A21 NA	6/1/72	A. J. White
6		IN747A NA	6/1/72	A. J. White
7		IN753A NA	6/1/72	A. J. White
8		DEC NO EIA NO DEC NO EIA NO	6/1/72	A. J. White

digital EQUIPMENT CORPORATION
 MAYNARD MASS. 01901
 TITLE
 VT40 DISPLAY GENERATOR
 SIZE CODE DCS NUMBER A320-0-1 REV E
 SCALE 1:1 SHEET 2 OF 2

SEMICONDUCTOR CONVERSION CHART

NOTES:

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2	R52, R54	RESISTOR 2K 1% 1/4W MF	1302329	57
2	R53, R55	RESISTOR 4K 1 1/2W 1% MF	1305354	53
1	4-40 INT. TIGHT WASHER	#4-40 INT. TIGHT WASHER	1305532	54
1	R14, R20, R21, R67, R80, R81	RESISTOR 6 2K 1/2W 5% MF	1311093	55
1	D45	DIODE AZ5 (24V)	109150-03	56
24	TP1-24	SP LUG	1309143-11	57
5	INSULATED JUMPER LEADS	INSULATED JUMPER LEADS	1309143-07	58
1	R159	47 1/4W 5%	1300368	59
1	D27	DIODE 1N754A	1300479	60
2	R19, R71	RESISTOR 100 1 1/2W 1% MF	1302853	62
1	R7	RESISTOR 6 49K 1/2W 1% MF	1309314-08	63
2	R15, R68	RESISTOR 5 11K 1 1/2W 1% MF	1304854	64
2	R17, R70	RESISTOR 19 6K 1 1/2W 1% MF	1309419	65
2	R4, R73	RESISTOR 680 1/2W 5%	1301424	66
1	R6	RESISTOR 3 83K 1 1/2W 1% MF	1309413	67
1	R8	RESISTOR 390 1/2W 5%	1300309	68
14	R136, R5, R76, R10, R119, R82, R51, R88, R142, R141, R153, R154	RESISTOR 1K 1/2W 5%	1300365	69
1	R9	RESISTOR 422 1/2W 1% MF	1300313	70
12	EYELET	EYELET	9006752	71
4	R49, R50, R114, R115	RESISTOR 100 1/2W 5%	1300228	72
2	R48, R112	RESISTOR 100 1/2W 5%	1300229	73
2	R61, R64	RESISTOR 10K 1/8W 1% MF	1305431	74
4	R13, R60, R155, R156	RESISTOR 2.7 1/2W 10%	1309444	75
1	R86	RESISTOR 820 1/2W 5%	1301775	76
3	R120, R116, R83	RESISTOR 560 1/2W 5%	1301890	77
2	R97, R126	RESISTOR 15K 1/4W 5% MF	1300-76	78
2	R107, R40	RESISTOR 5W 1/8W 1% MF	1305122	79
1	Q45	TRANSISTOR DEC 3009B	1503100	80
11	Q19, Q22, Q5, Q27, Q10, Q11, Q34, Q32, Q33, Q40, Q17	TRANSISTOR DEC 6534B <i>MPS 6534</i>	1503409-01	81
7	Q21, Q18, Q35, Q41, Q44, Q16, Q48	TRANSISTOR DEC 6531B	1509338	82
4	Q12, Q15, Q38, Q39	TRANSISTOR 2N5245	1509681	83
10	Q1, Q2, Q6, Q13, Q14, Q23, Q24, Q28, Q36, Q37	TRANSISTOR DEC 3646	1503014	84
4	Q3, Q4, Q25, Q26	TRANSISTOR 2N4250	1509142	85
1	Q20	TRANSISTOR MJE 3055	151055C	86
1	Q42	TRANSISTOR MJE 2955	1510556	87
6	Q7, Q8, Q9, Q29, Q30, Q31	TRANSISTOR 2N5638	1511095	88
3	E34, E39, E45	IC DEC 7485	1910224	89
5	E22, E29, E35, E40, E46	IC DEC 74157	1910655	90
3	E24, E23, E30	IC DEC 74191	1910096-01	91
4	E4, E7, E9, E10	IC LM 318	1910735	92
2	E5, E5	IC DEC 0002	1910446	93
5	E1, E2, E25, E26, E31	IC DEC 741	1910298	94
2	E8, E36	IC LM 302	1909343	95
4	E6, E11, E12, E13	IC LM 310	1910235	96
1	E47	IC DEC 7417	1909829	97
1	E49	IC DEC 7474	1905547	98
2	E41, E42	IC DEC 74504	1910534	99
1	E48	IC DEC 7476	1905585	100
2	E13, E4	IC DEC 8202	1910275	101
6	E15, E21, E17, E18, E19, E21	IC DEC 74193	1910018	102
4	E29, E33, E38, E44	IC DEC 7497	1911195	103
4	E27, E32, E37, E43	IC DEC 7498	1910263	104



IC TYPE	GND	+5V

FIRST USED ON OPTION MODEL: 1748

ETCH BOARD REV: _____

REV. _____

DATE _____

DRN _____

CHK'D _____

TITLE: VT40 DISPLAY GENERATOR

NUMBER: 4320-0-1

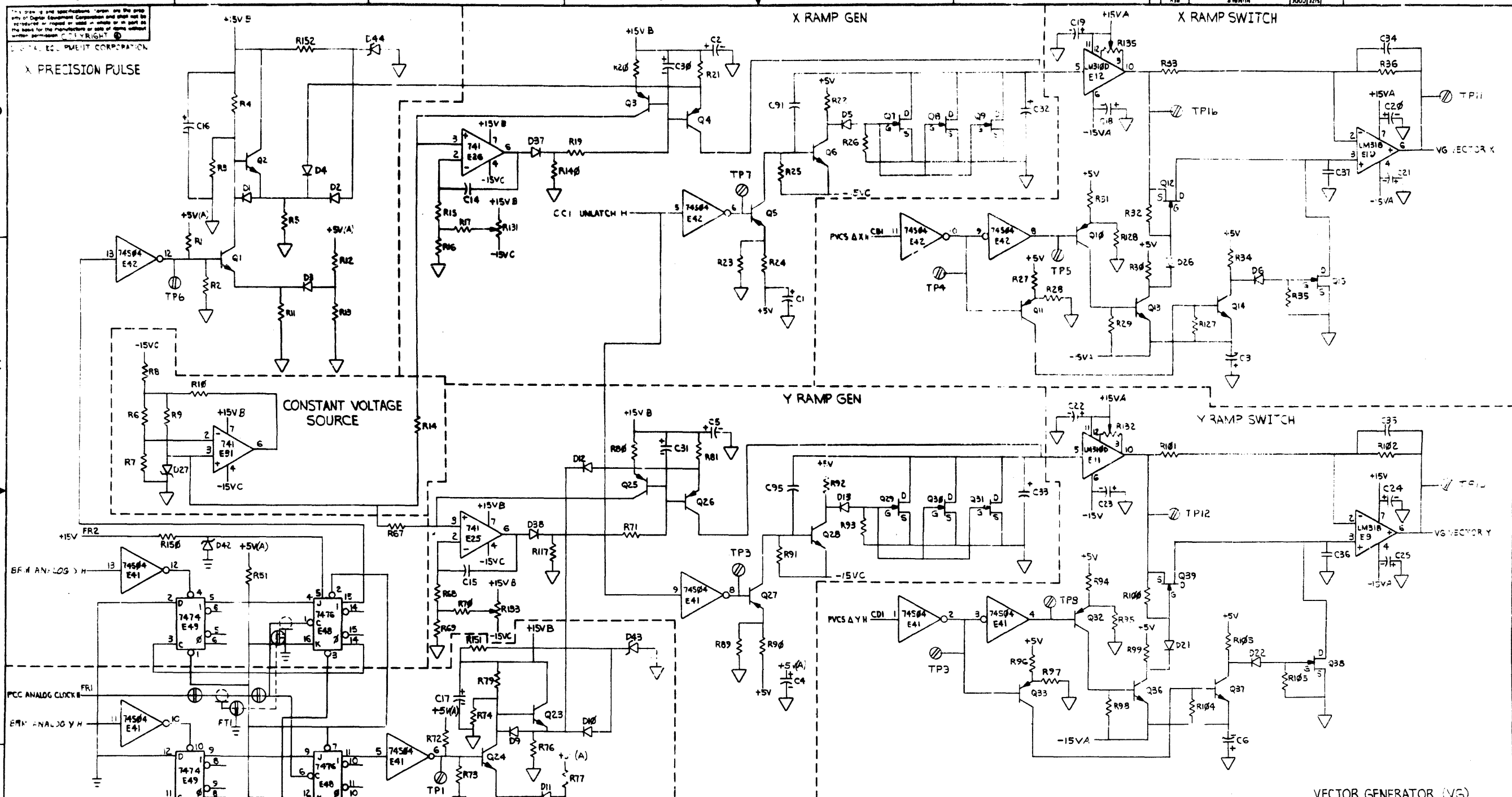
REV. E

SCALE: _____

SHEET 5 OF _____

SEMICONDUCTOR CONVERSION CHART

DIST: _____



VECTOR GENERATOR (VG)

FIRST USED CN OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN	DATE	
DECIMALS	ANGLES	CHKD	DATE	
XXX - 005	10' 30"	ENG	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROJ. ENG.	DATE	
MATERIAL		PROD.	DATE	
NEXT HIGHER ASSY				
FINISH				
SCALE				
SHEET 4 OF				

digital EQUIPMENT CORPORATION
MAYFIELD MASSACHUSETTS

VT40
DISPLAY
GENERATOR

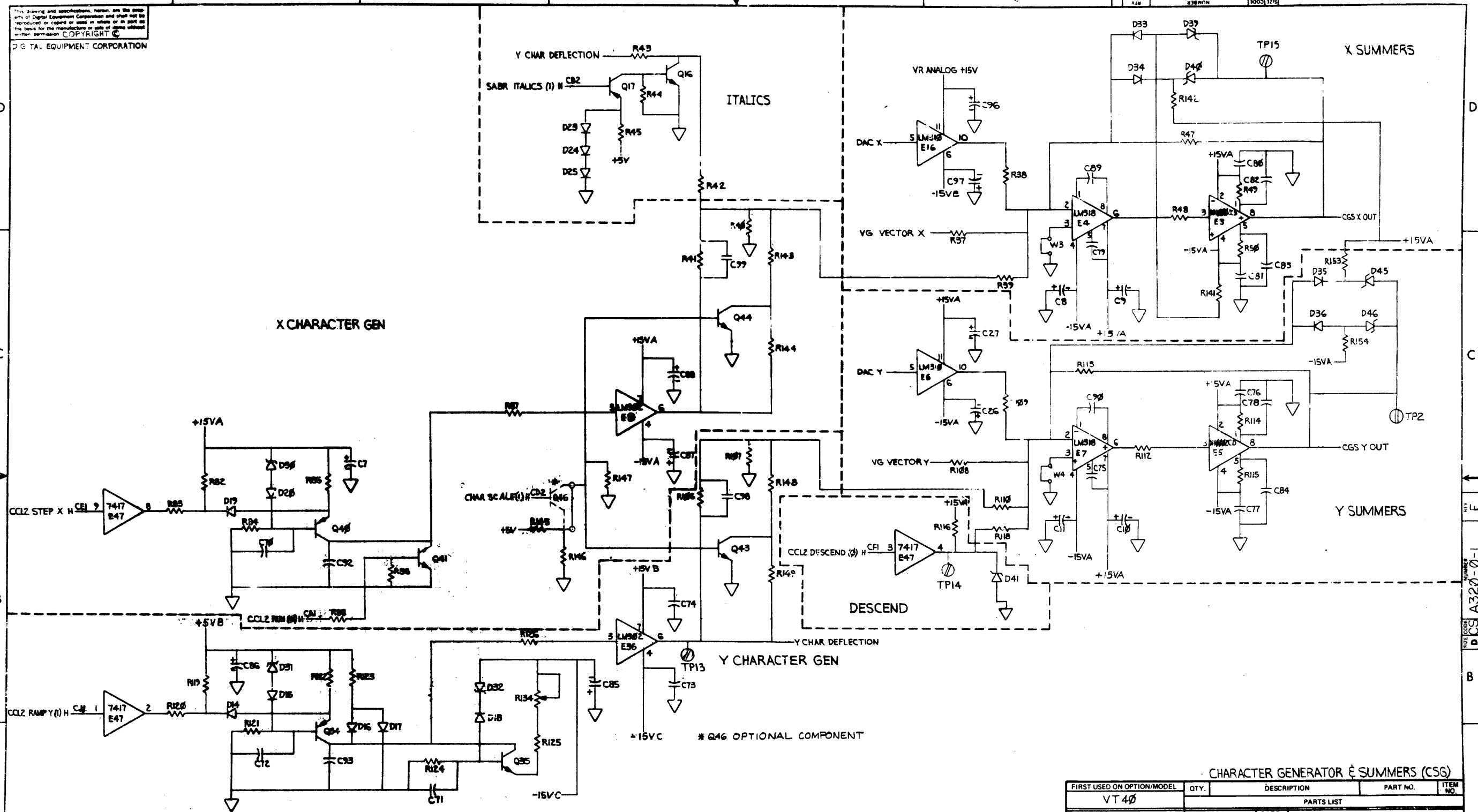
SIZE CODE: B-DD-VT40-0
NUMBER: DCS A320-0
REV: 0

REVISIONS

NO.	DATE	DESCRIPTION

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DIGITAL EQUIPMENT CORPORATION



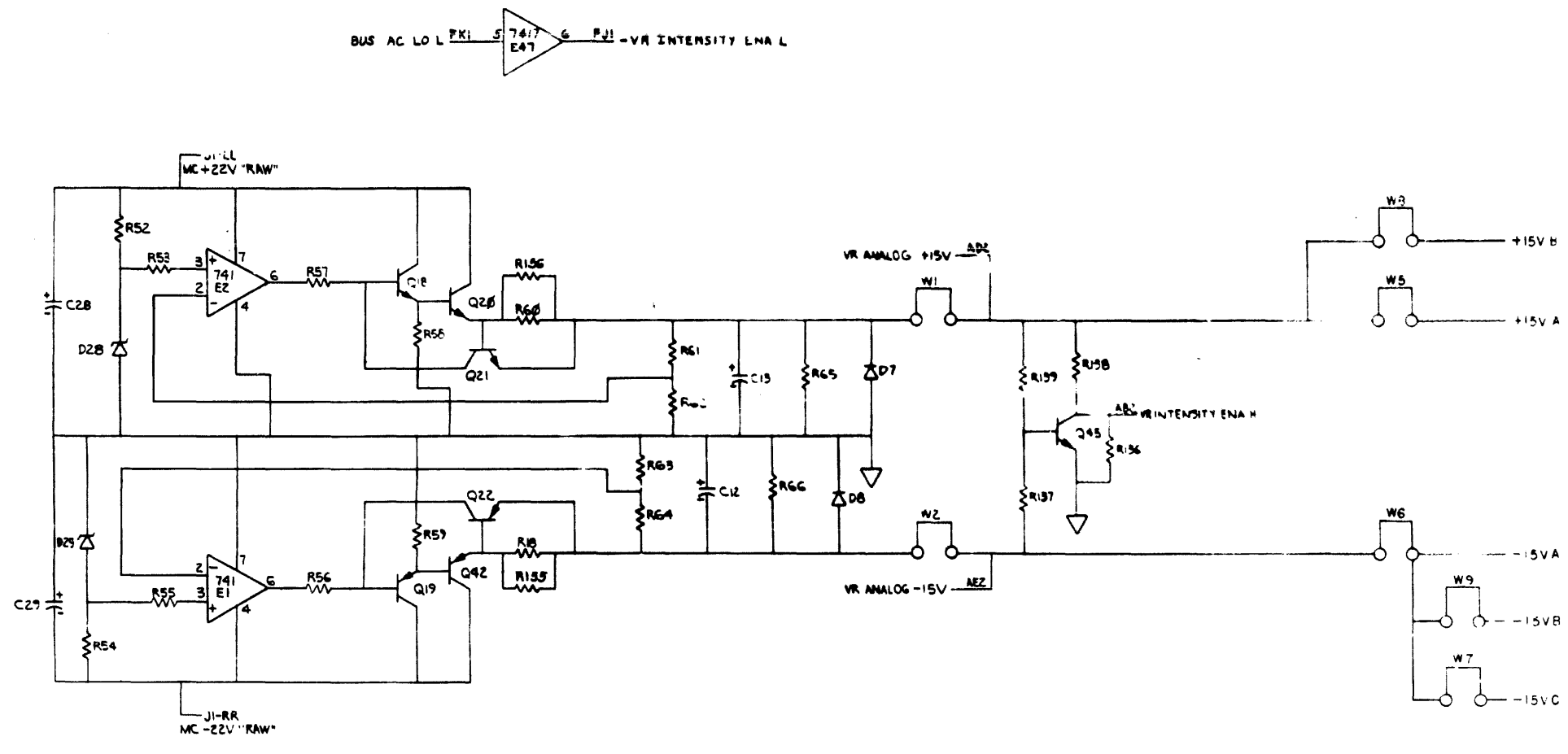
REV	CHANGE NO

CHARACTER GENERATOR & SUMMERS (CSG)			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
VT 40			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES			
DECIMALS	ANGLES	TITLE	
XXX - 006	± 0° 30'	VT 40	
XX - 02		DISPLAY GENERATOR	
X - 1			
RE MOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			
MATERIAL			
NEXT HIGHER ASSY			
FINISH			
SCALE		SIZE CODE	NUMBER
SHEET 5 OF		DCS	A320-0-1
		REV	E

DCS A320-0-1

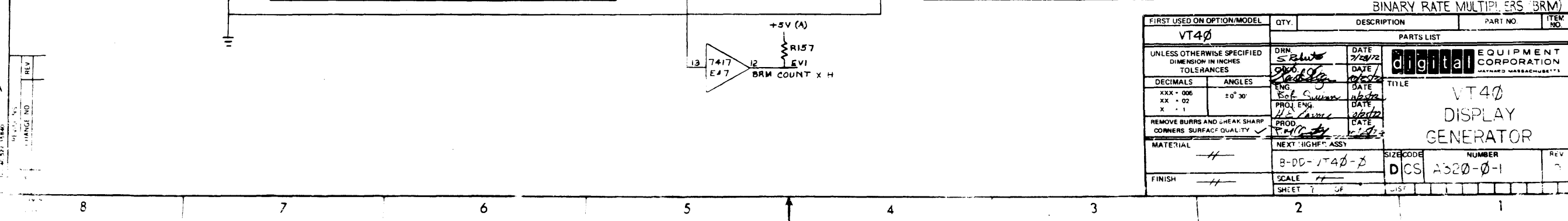
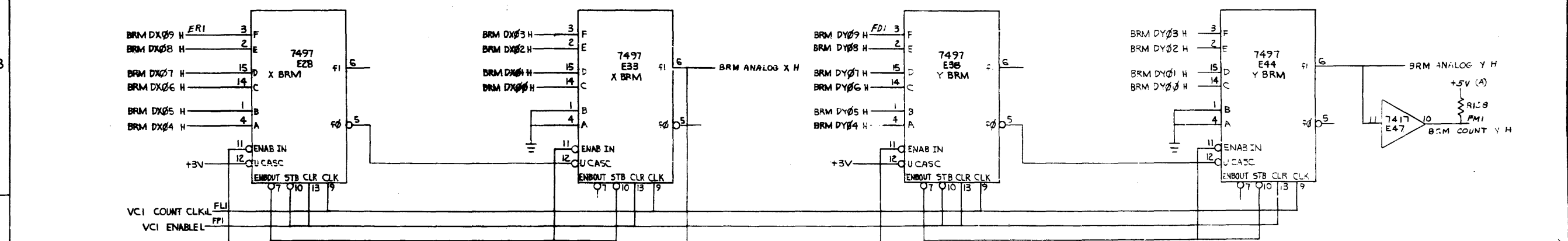
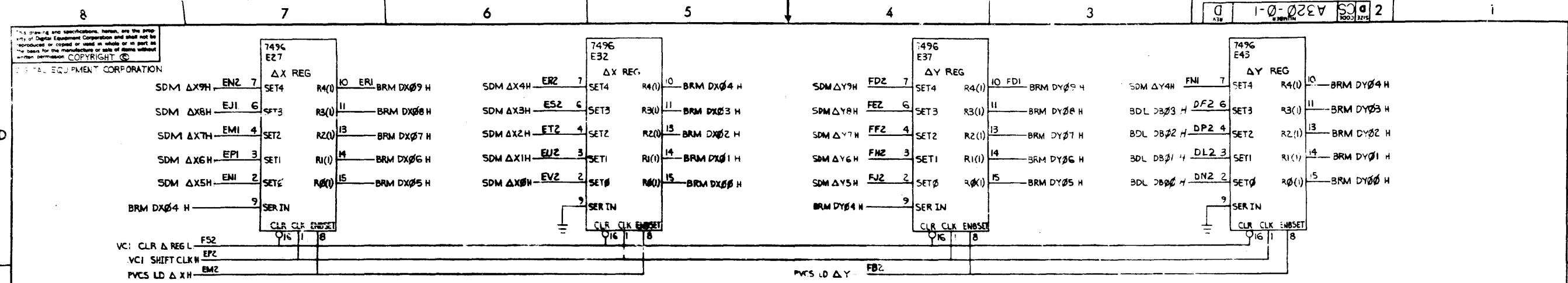
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VOLTAGE REGULATORS (VR)

FIRST USED OR OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN 5 12/25/72	DATE 7/25/72	digital EQUIPMENT CORPORATION WATFORD, MASSACHUSETTS	
DECIMALS	ENG 1/16	DATE 1/25/72		
ANGLES	20° 30'	DATE 1/25/72	TITLE VT40 DISPLAY GENERATOR	
XXX - 005 XX - 02 X - 1	PROJ ENG H.S. Lowery	DATE 11/21/76		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD P. J. G. G.	DATE 10/1/77		
MATERIAL	NEXT HIGHER ASSY	SIZE CODE	NUMBER	
FINISH	SCALE	D 23	A 320-0-1	
	SHEET 6			

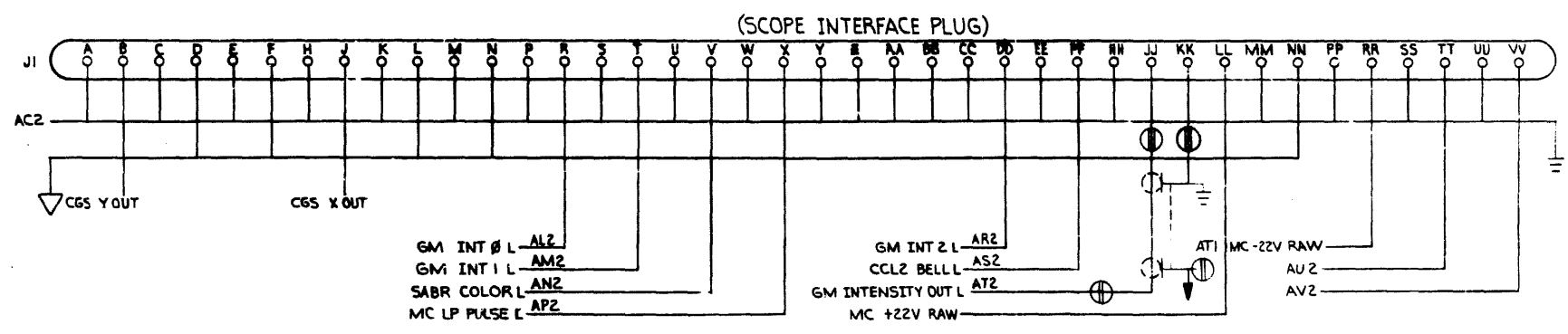
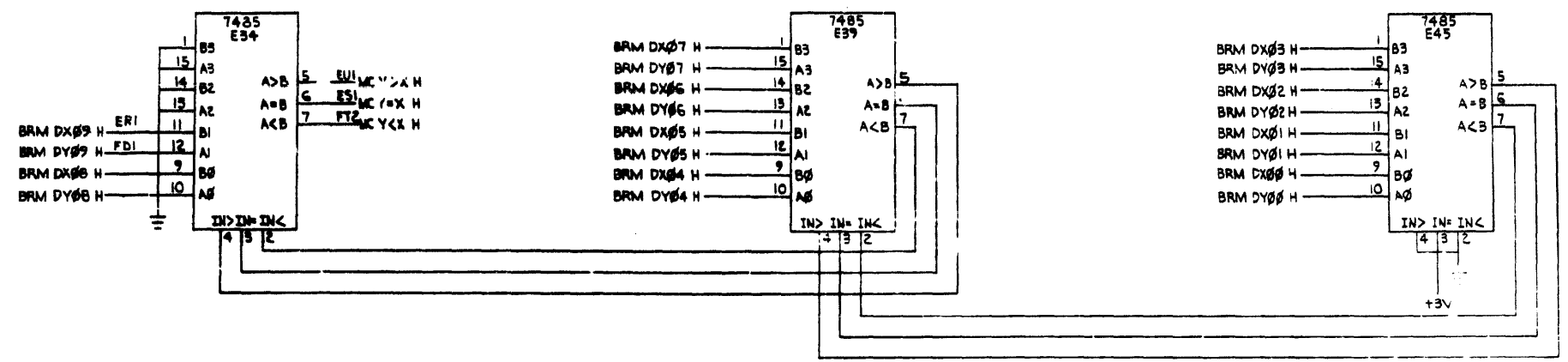


FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	TITLE		
XXX - 006	±0° 30'	VT40 DISPLAY GENERATOR		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY	SIZE CODE	NUMBER	REV
FINISH	SCALE	DCS	A320-0-1	
SHEET 7 OF		LIST		

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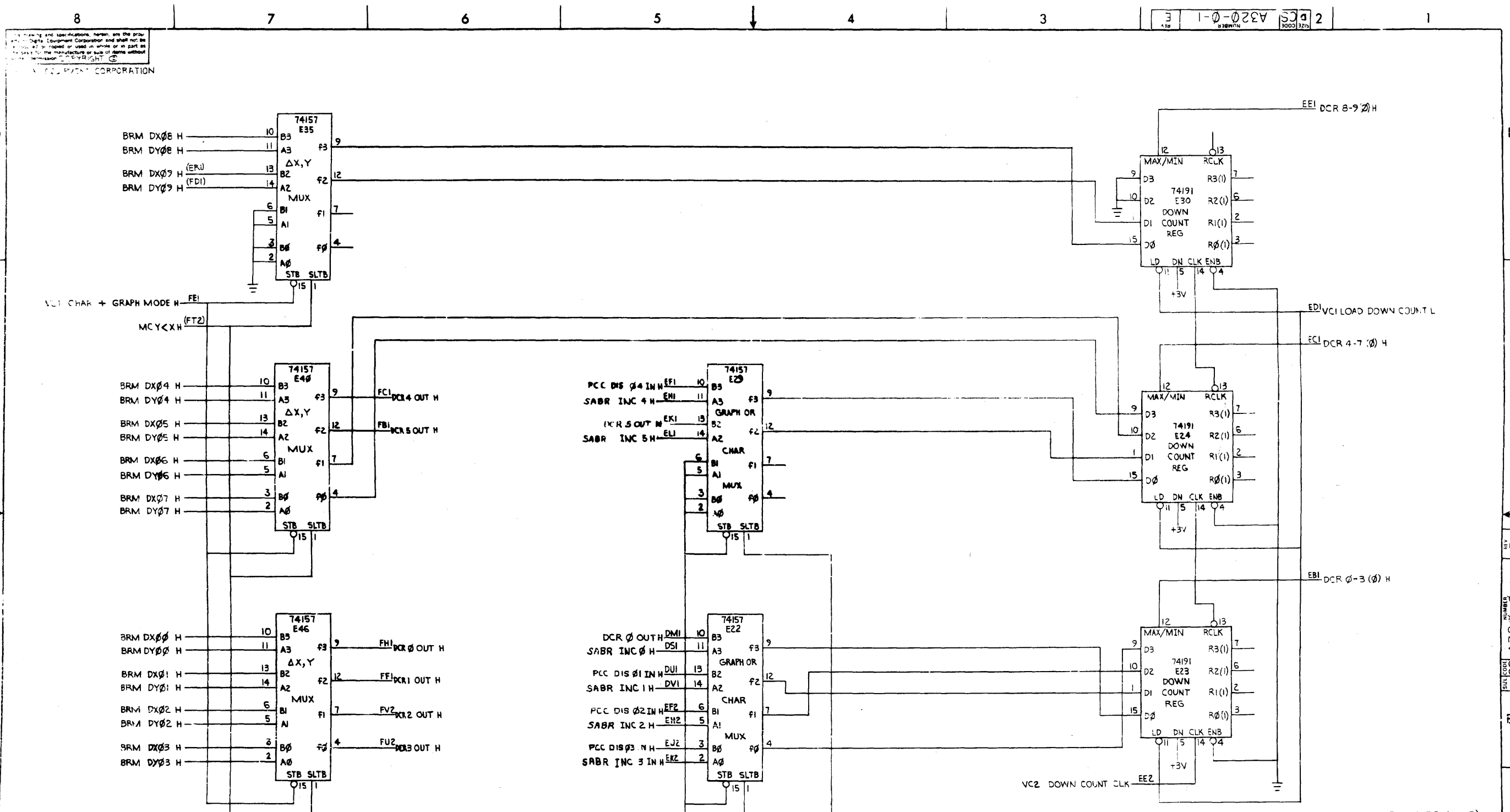
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MAGNITUDE COMPARTORS (MC)

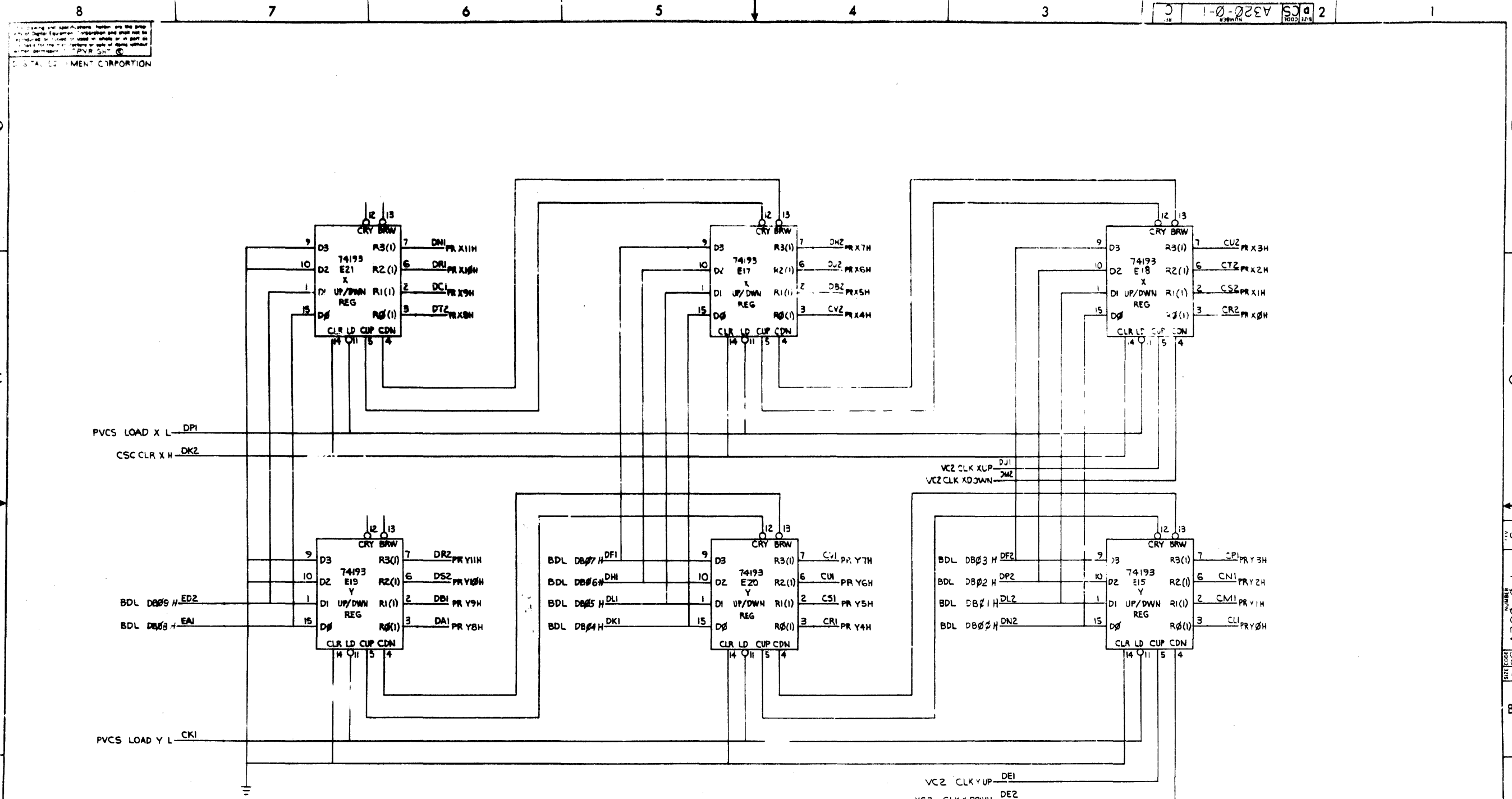
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN DATE	digital EQUIPMENT CORPORATION MAYFIELD MASSACHUSETTS	
DECIMALS	ANGLES	ENG DATE	TITLE VT40 DISPLAY GENERATOR	
XXX . 00	10' 30'	PROJ ENG DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD DATE	SIZE CODE D CS	
MATERIAL	3-00-40-0	NEKT HIGH/ASSY	NUMBER -320-0-1	REV 0
FINISH		SCALE	SHEET # OF	

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FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT40					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN	DATE	digital EQUIPMENT CORPORATION	
		CHKD	DATE		
DECIMALS	ANGLES	ENG.	DATE	TITLE	
xxx . 006	± 0' 30"	PROJ ENG.	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD.	DATE	VT40 DISPLAY GENERATOR	
MATERIAL		NEXT HIGHER ASSY		SIZE CODE	NUMBER
		B-70-VT40-0		DCS	A320-0-1
FINISH		SCALE		SHEET	REV
				9 OF	E

SIZE CODE NUMBER DCS A320-0-1 REV E

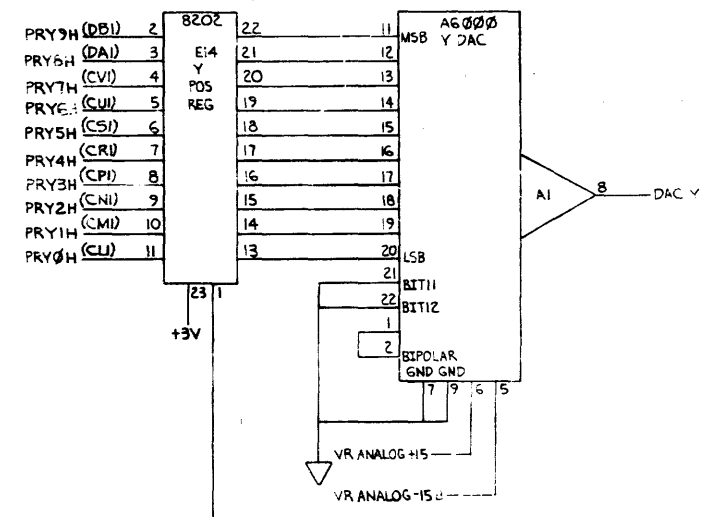
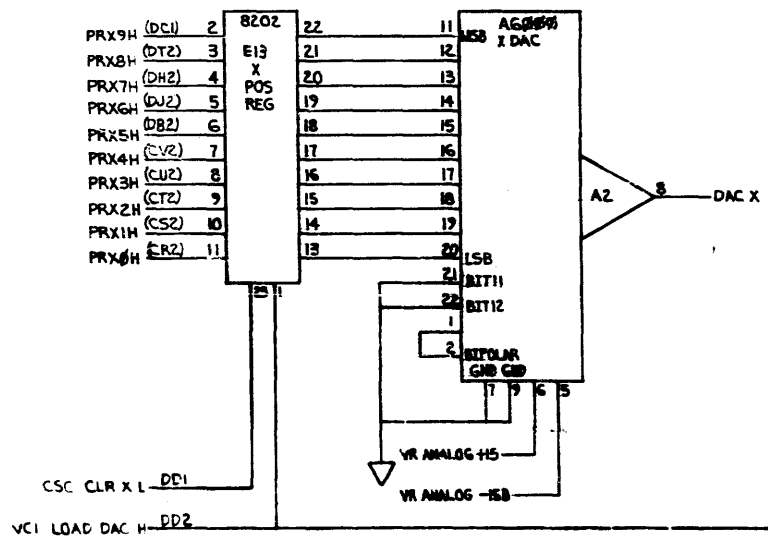
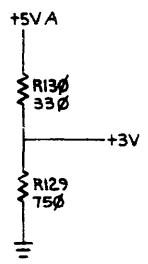


REV	DESCRIPTION	DATE
1	INITIAL	10/1/72
2	REVISED	10/1/72
3	REVISED	10/1/72
4	REVISED	10/1/72
5	REVISED	10/1/72
6	REVISED	10/1/72
7	REVISED	10/1/72
8	REVISED	10/1/72

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT40		POSITION REGISTERS (PR)		
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES		DRN	DATE	digital EQUIPMENT CORPORATION MILFORD MASSACHUSETTS
TOLERANCES:		DATE	DATE	
DECIMALS	ANGLES	ENG.	DATE	TITLE VT40 DISPLAY GENERATOR
XXX - 005	10 30	PROJ ENG	DATE	
XX - 02		DATE	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	DATE	SIZE CODE D 06
MATERIAL		DATE	DATE	
NEXT HIGHER ASSY		3 DD-VT40-0		NUMBER 4700-0
FINISH		SCALE	1:1	REF.
		SHEET	7 OF 7	

8
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CS 4320-0-1 2



DIGITAL TO ANALOG CONVERTERS (DAC)

QTY	DESCRIPTION	PART NO	ITEM NO
1	VT40		
PARTS LIST			
DRN	DATE	digital EQUIPMENT CORPORATION	
5.8.1072	10/10/72	MAYNARD MASSACHUSETTS	
ENG	DATE	TITLE	
10/10/72	10/10/72	VT40	
PROJ. ENG	DATE	DISPLAY	
10/10/72	10/10/72	GENERATOR	
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER
	B-DD-VT40-0	DCS	4320-0-1
FINISH	SCALE	SHEET	REV
	11 OF		C

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS								REMARKS
1	*	A	B	C	D	E	F	H	
2	*	A	B	C	D	E	D	F	
3	*	A	B	B	C	C	C	C	(TD)
4	*	A	A	B	B	C	C	C	(MD)
5	*	A	A	A	A	A	A	A	(SABR)
6	*	A	A	A	A	A	A	A	(GM)
7	*	A	B	C	B	D	E	F	(PVCS)
8	*	A	B	B	B	B	B	B	(SDM)
9	*	A	A	B	B	C	C	C	(CCL1)
10	*	A	A	B	B	C	C	C	(CCL2)
11	*	A	A	A	A	A	A	A	(CRD)
12	*	A	A	A	A	A	A	A	(CSC)

ECO NO.	ETCH REV.	ENG.	DATE
1, A	A	HRC	1-15-72
2	B	HRC	2-1-73
3, A, B	C	HRC	2-4-74
4	C	HRC	4-23-74
5	C	HRC	4-29-74
6	C	HRC	6-3-74
7	C	HRC	7-8-74

FIRST USED ON OPTION/MODEL

GT40

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DRN. NANCY MOORE	DATE 10-27-72
CHK'D. NANCY MOORE	DATE
ENG. [Signature]	DATE 10-30-72
PROJ. ENG. [Signature]	DATE 10/30/72
PROD. [Signature]	DATE 11/1/72

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE
VT 40 DISPLAY CONTROL

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NEXT HIGHER ASSY.

B-DD-GT40-0

SCALE

SHEET 1 OF 12

SIZE	CODE	NUMBER	REV.
B	CS	M7013-0-1	H

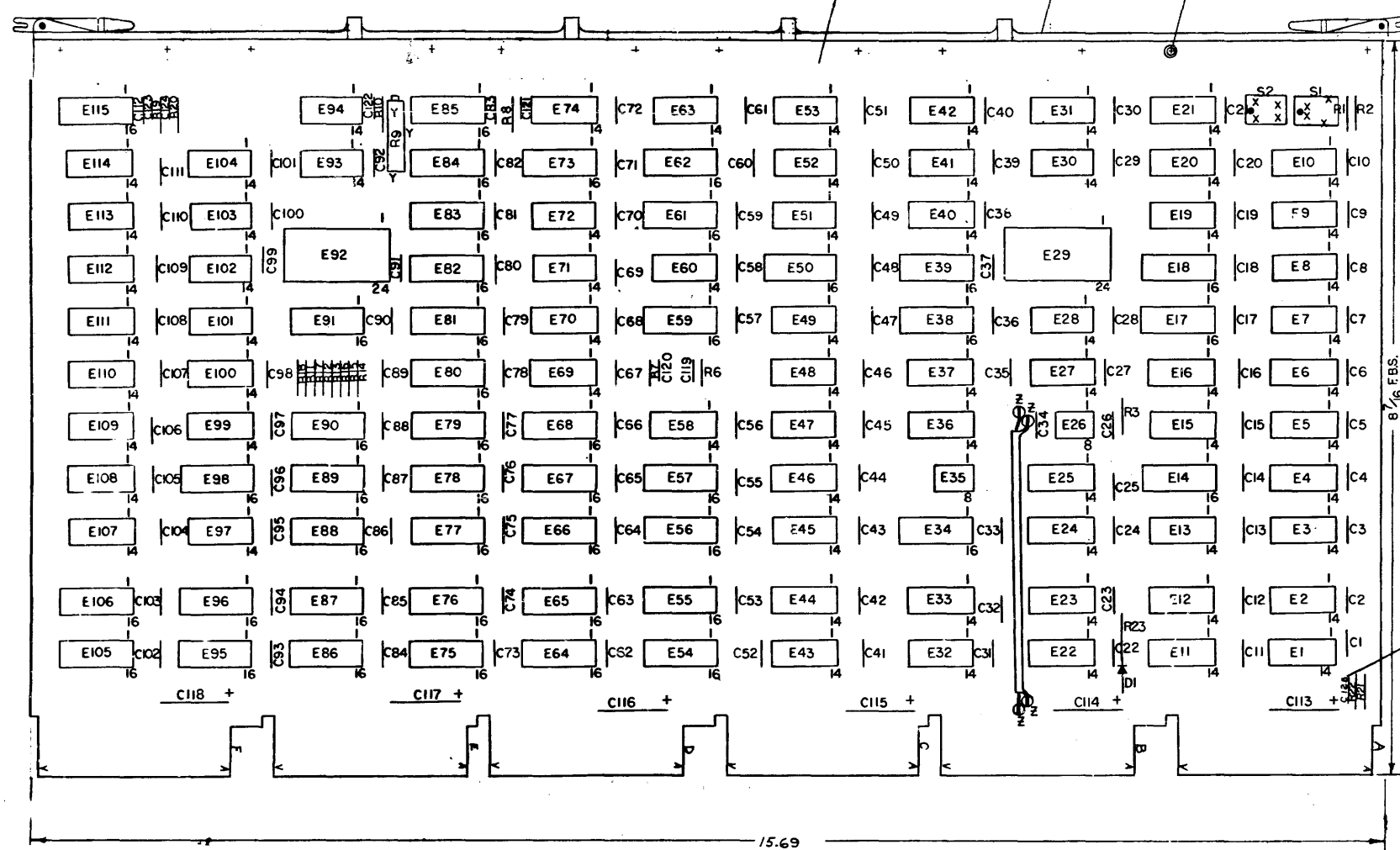
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8 7 6 5 4 3

E M7013-0-1 2 1

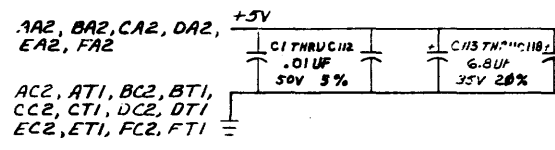
NOTES:

- 1. UNLESS OTHERWISE SPECIFIED, RESISTANCE IS IN OHMS. CAPACITANCE IS IN PICOFARADS
- 2. ADD CAPACITOR C125 0.1MFD AFTER XOR TEST.



DEC IC 9602	8	16
IM 5603	8	16
DEC IC 74155	8	16
DEC IC 74174	8	16
DEC IC 75451	4	8
DEC IC 7477	10	5
DEC IC 7476	13	5
DEC IC 7473	11	4
DEC IC 7442	8	16
DEC IC 74194	8	16
DEC IC 74193	8	16
DEC IC 74175	8	16
DEC IC 74157	8	16
DEC IC 7454	12	24
DEC IC 74153	8	16
DEC IC 74123	8	16

IC PIN LOCATIONS



REF	ETCHED CIRCUIT BOARD	5010145	
REF	X/Y COORDINATE HOLE LOCATION	K-60-M7013-0-4	2
REF	ASSY/DRILLING HOLE LAYOUT	D-AH-M7013-0-5	3
REF	MODULE ECO HISTORY	B-MH-M7013-0-6	4
12	EYELET	9008732	5
1	HANDLE	1210711-2	6
2	C120, C124	CAP 10PF 100V 5%	10 00006
2	C121, C123	CAP 100PF 100V 5%	10 00016
1	C119	CAP 330PF 100V 5%	10 00023
1	C122	CAP 470PF 100V 5%	10 00024
6	C113, THRU C118	CAP 6.8 MFD 35V 20% S TANT	10 00067
118	C1 THRU C12, C25 -	CAP 0.1 MFD 50V 5%	1001670 -C
1	D1	DIODE D664	11 00114
10	E7, E8, E25, E44, E45, E46, E47, E22, E28, E72	I.C. DEC 7474	19 05547
14	E3, E5, E9, E11, E12, E15, E23, E31	I.C. DEC 7400	19 05575
4	E2, E19, E30, E102	I.C. DEC 7410	19 05576
2	E13, E22	I.C. DEC 7420	19 05577
3	E1, E4, E70	I.C. DEC 7430	19 05578
2	E14, E73	I.C. DEC 7476	19 05585
8	E16, E51, E103, E104, E111, E112	I.C. DEC 7473	19 05587
15	E6, E33, E36, E37, E40, E41, E42, E49, E53, E100, E97, E101, E96, E113, E48	I.C. DEC 7402	19 09004
1	E20	I.C. DEC 7493	19 09054
10	E21, E24, E27, E28, E32, E43, E53, E58, E71, E10	I.C. DEC 7404	19 09886
2	E29, E82	I.C. DEC 74154	19 09701
9	E18, E75, E76, E88, E87, E35, E36, E105, E106	I.C. DEC 74153	19 09937
1	E10	I.C. DEC 7413	19 09989
4	E17, E81, E83, E89	I.C. DEC 74193	19 10018
3	E84, E85, E89	I.C. DEC 7442	19 10048
1	E108	I.C. DEC 7437	19 10091
2	E74, E94	I.C. DEC 74121	19 10230
2	E59, E115	I.C. DEC 74123	19 10436
2	E90, E91	I.C. DEC 74194	19 10623
3	E34, E38, E50	I.C. DEC 74175	19 10651
3	E36, E57, E68	I.C. DEC 74174	19 10652
7	E39, E54, E55, E54, E55, E87, E88	I.C. DEC 74157	19 10655
1	E82	I.C. DEC 74155	19 10856
2	E26, E35	I.C. DEC 75451	19 10406

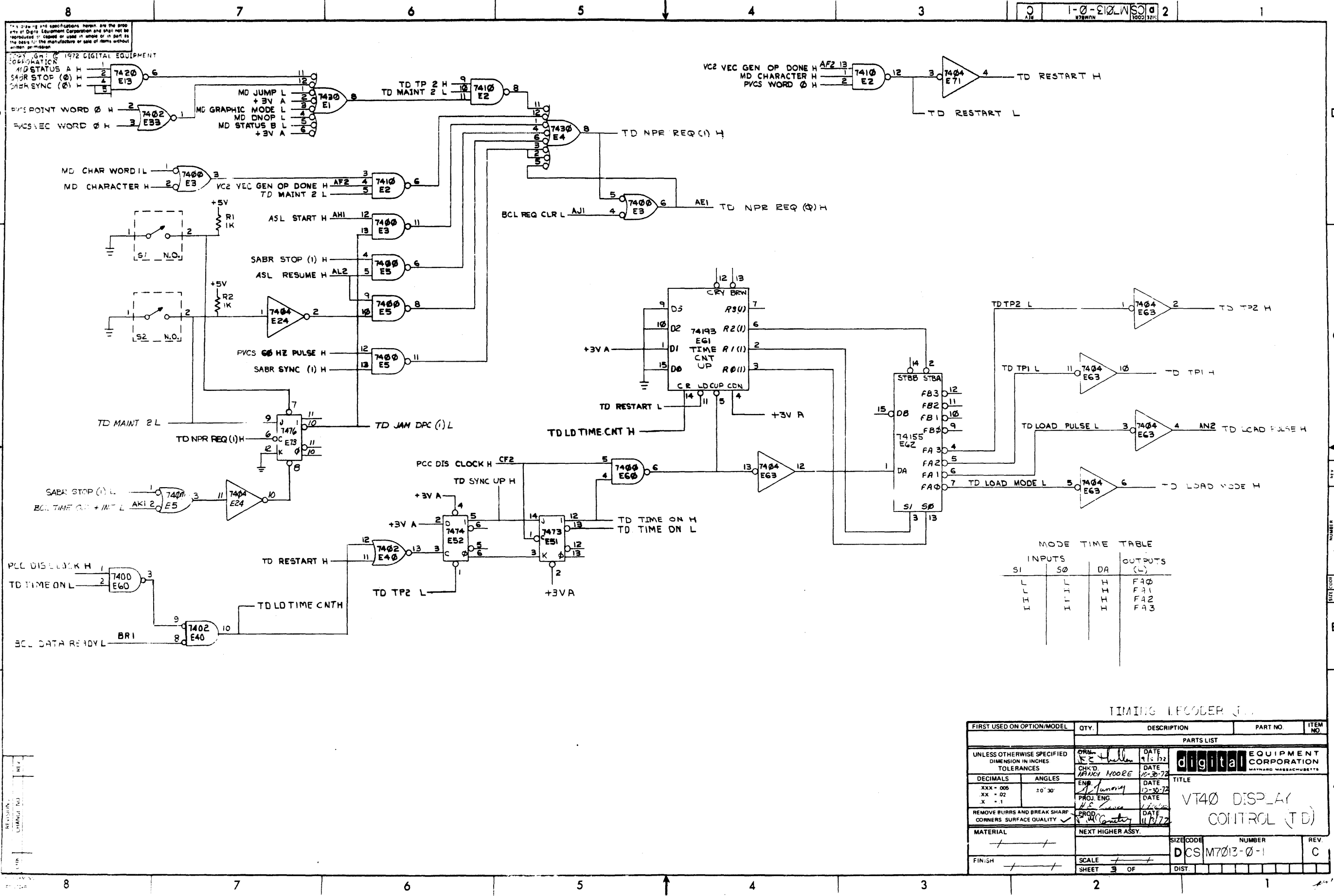
1	E77	I.C. IM 5803 OR 74187	23007A2	39
1	E78	I.C. IM 5803 OR 74187	23012A2	40
1	E79	I.C. IM 5803 OR 74187	23009A2	41
1	E80	I.C. IM 5803 OR 74187	23008A2	42
1	E81	I.C. IM 5803 OR 74187	23010A2	43
1	E82	I.C. IM 5803 OR 74187	23011A2	44
1	R3	RES 47 1/4 W 5%	13 00202	45
10	R1, R2, R11 THRU R18	RES 1K 1/8 W 5%	13 00385	46
2	R6, R7	RES 4.7K 1/8 W 5%	13 00447	47
1	R23	RES 22K 1/8 W 5%	13 01808	48
2	R19, R20	RES 5.6K 1/8 W 5%	13 01874	49
2	R21, R22	RES 560 1/8 W 5%	1301890	50
2	R8, R10	RES 3K 1/8 W .1%	13 02676	51
1	R9	RES POT 2K 1/8 W 10% 78PR	13 09143-08	52
2	S1, S2	SWITCH	12 09898	53
1		COAX CABLE FG1/4U 4" LG	91 07530	54
REF		CHARACTER ROM DISTING		55

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

SEMICONDUCTOR CONVERSION CHART

10-10886-00-1-10886

REV. 11/72



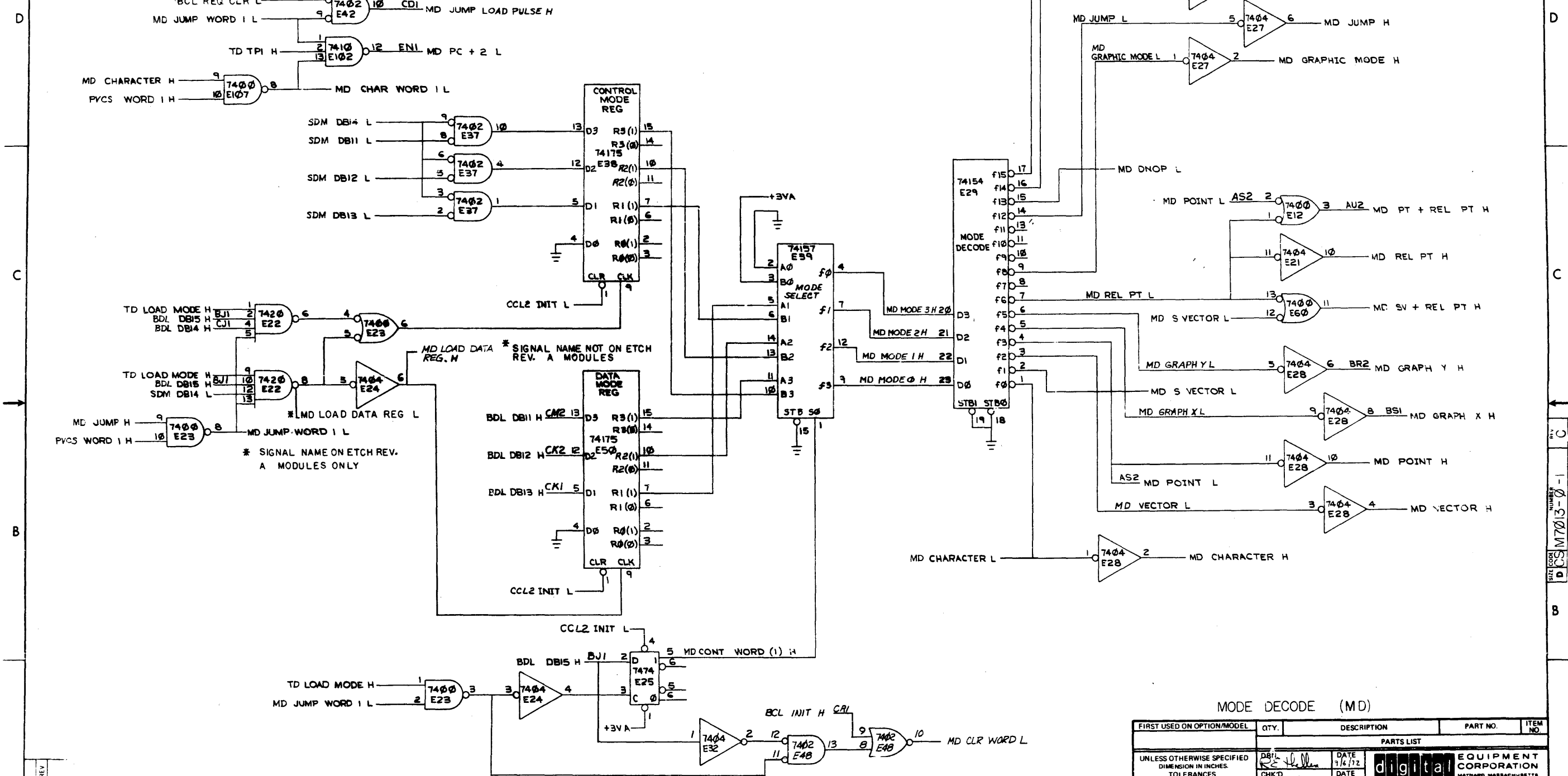
MODE TIME TABLE

INPUTS		DA	OUTPUTS (L)
S1	S0		
L	L	H	F40
L	L	L	F41
L	H	H	F42
L	H	L	F43

TIMING LOGGER

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN K E	DATE 9 13 72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	CHK'D MOORE	DATE 12-30-72		
ANGLES	ENG MORNING	DATE 12-30-72	TITLE VT40 DISPLAY CONTROL (TD)	
XXX - 005 XX - 02 X - 1	PROJ. ENG. H. S. GARDNER	DATE 11/13/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD. W. J. GARDNER	DATE 11/13/72		
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH	SCALE	SHEET 3 OF	DCS M7013-0-1	REV. C

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MODE DECODE (MD)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES			digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
TOLERANCES				
DECIMALS	ANGLES	DATE	TITLE	
.XXX - .005	± 0° 30'	7/16/72	VT40 DISPLAY CONTROL (MD)	
.XX - .02		11/9/72		
.X - .1		11/3/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.	DATE		
FINISH	SCALE	11/15/72		
SHEET 4 OF			SIZE CODE	NUMBER
			D	CS M7013-0-1
			DIST.	REV
				C

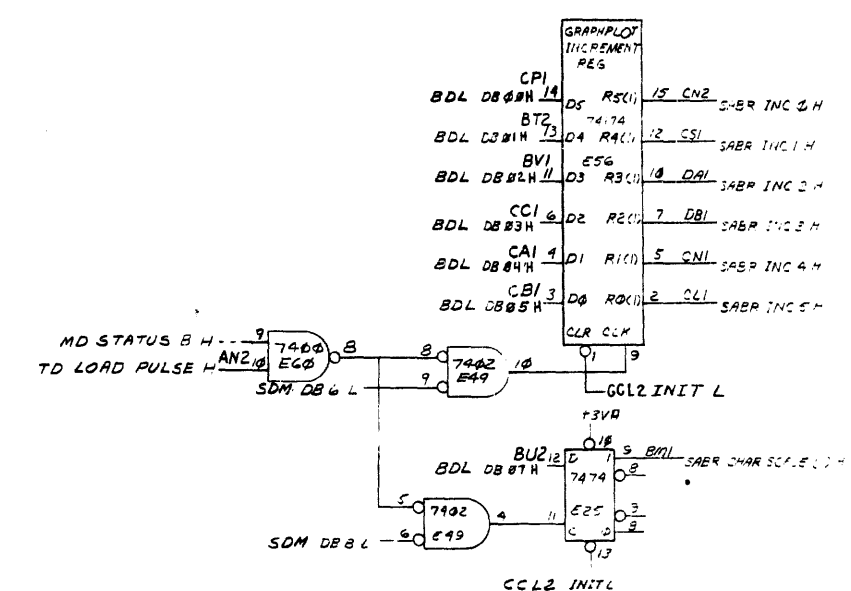
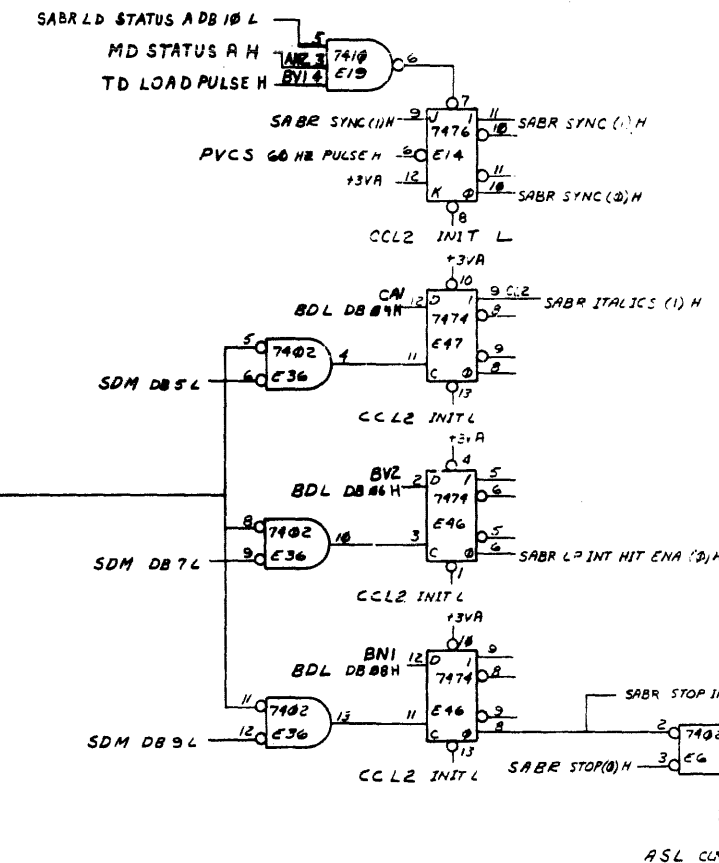
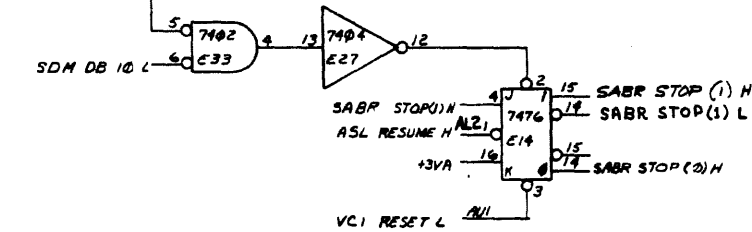
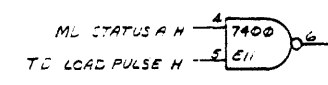
REVISIONS
 CHANGE NO.

REV	DATE	DESCRIPTION

NUMBER
 CS M7013-0-1
 REV. C

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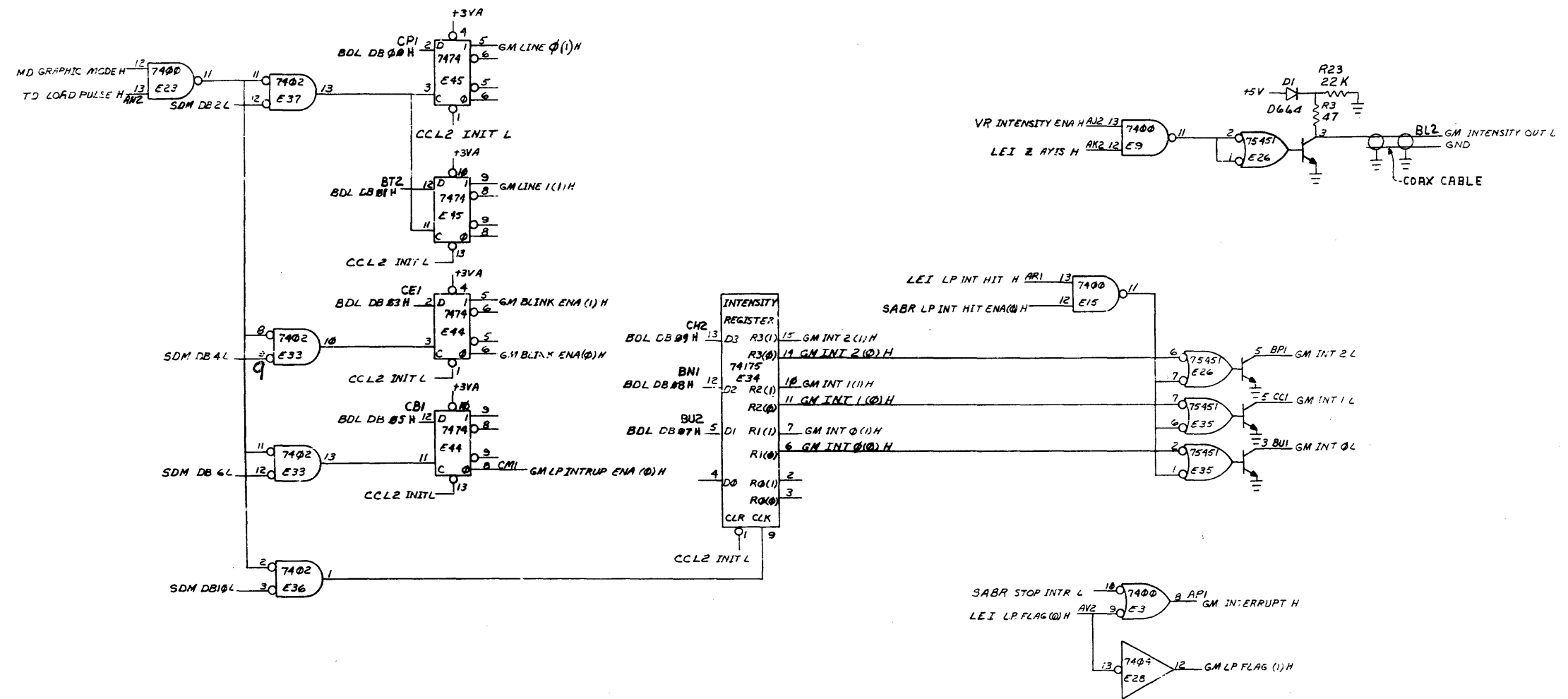


STATUS A & B REG (SABR)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	BY S. Manderson	DATE 9-6-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS	CHK'D RANKY MOORE	DATE 10-30-72		
ANGLE	ENG S. Manderson	DATE 10-30-72	TITLE VT40 DISPLAY CONTROL (SABR)	
XXX - .005 XX - .02 X - .1	PRY. ENG. M. Lawrence	DATE 11-29-72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DRD S. Manderson	DATE 11/1/72		
MATERIAL	NEXT HIGHER ASSY	SIZE CODE	NUMBER	REV
		DCS	M7013-0-1	A
		SCALE	SHEET 5 OF	DIST

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GRAPHIC MODE (GM)

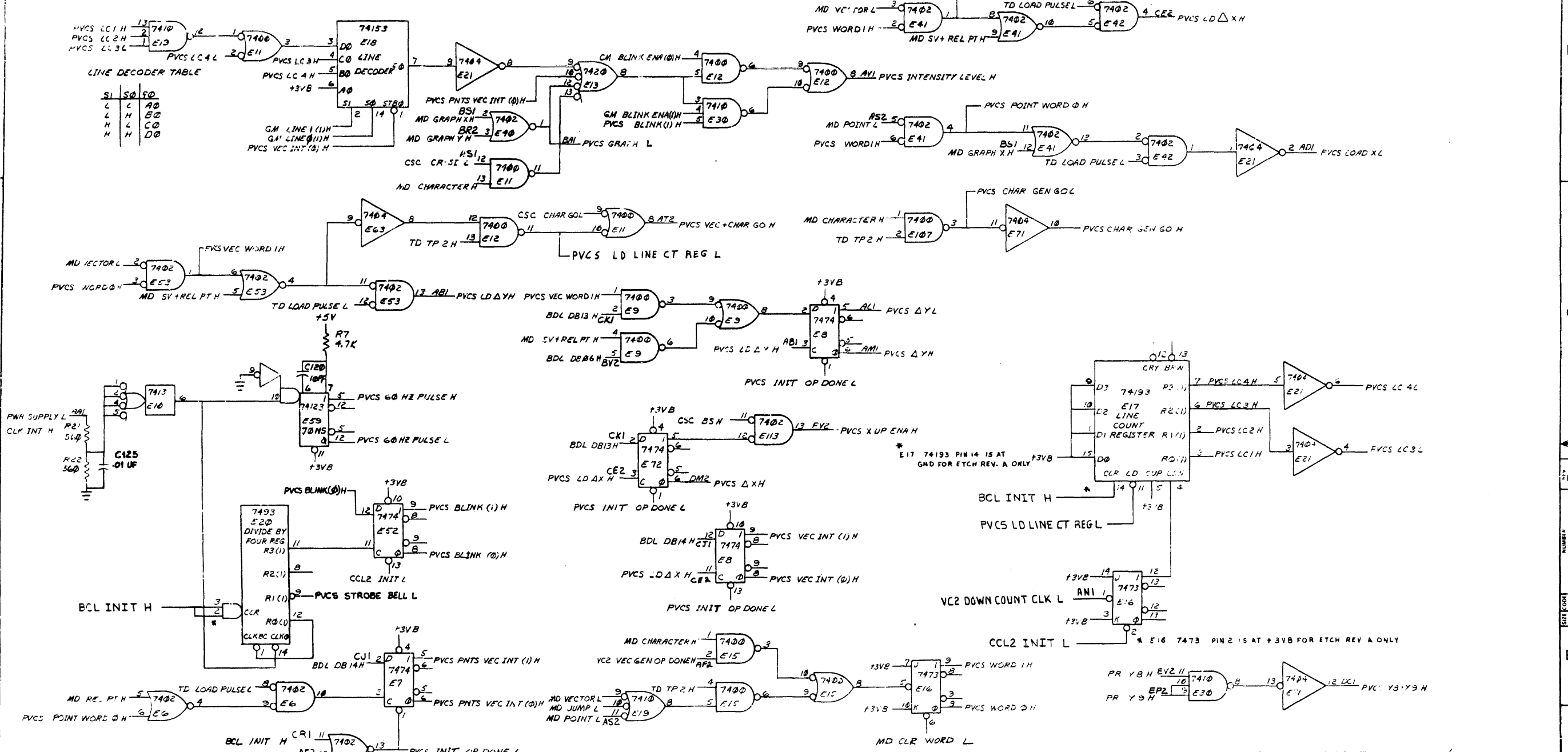
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DBM	DATE	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	CHK'D	DATE	TITLE VT40 DISPLAY CONTROL (GM)	
ANGLES	NANCY McRE	10-30-72		
XXX - .005	ENG	DATE	SIZE CODE NUMBER REV DCS M7013-0-1 A	
XX - .02	PROJ. ENG.	DATE		
X - .1	DATE	DATE	SCALE OF DIST.	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	PROD. DATE	DATE		
MATERIAL	NEXT HIGHER ASSY.			
FINISH				
SHEET 6 OF				

REVISIONS
LINK CHANGE NO
REV

REV A
NUMBER M7013-0-1
SIZE CODE DCS

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED
 DIMENSIONS IN PARENTHESES ARE FOR REFERENCE ONLY
 DIMENSIONS IN BRACKETS ARE FOR REFERENCE ONLY

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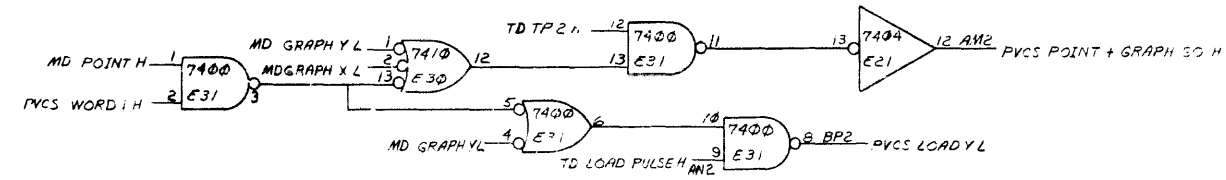


LINE DECODER TABLE

S1	S0	D0
L	L	A0
L	H	B0
H	L	C0
H	H	D0

POINT VECTOR CHARACTER START (PVCS)

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN 1/16	DATE 10-31-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	ANGLES	DATE 10-31-72		
XXX - 005 XX - 02 X - 1	±0° 30'	DATE 10-31-72	TITLE VT40 DISPLAY CONTROL (PVCS)	
REMOVE BURRS AND BREAK SHARP CORNERS SURF ACC QUALITY	PROJ. ENG. 11/1/72	DATE 11/1/72		
MATERIAL	NEXT HIGHER ASSY	SIZE CODE	NUMBER	REV
FIN	SCALE	DIST	DCS	M7013-0-1
	SHEET	OF		E

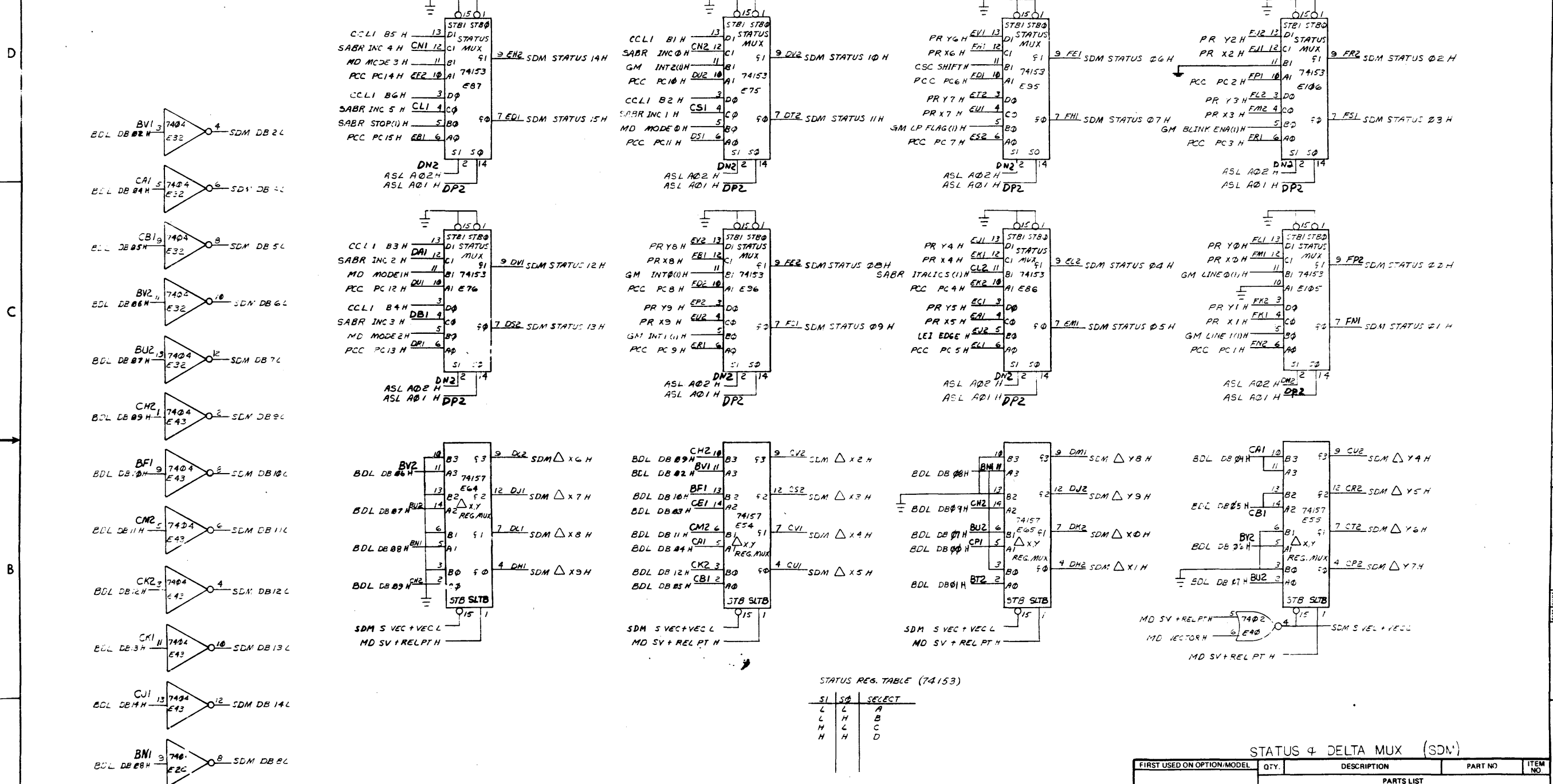


REV. 1
 CHANGE NO.

SIZE CODE NUMBER
 DCS M7013-0-1
 B

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STATUS REG. TABLE (74153)

SI	S0	SELECT
L	L	A
L	H	B
H	L	C
H	H	D

STATUS 4 DELTA MUX (SDM)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES				
DECIMALS		ANGLES		
XXX - .006		±0° 30'		
XX - .02				
X - .1				
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SCALE		
		SHEET 8 OF		
PARTS LIST		TITLE		
DCS M7013-0-1 DATE 7-7-72 DATE 10-30-72 DATE 11-17-72		digital EQUIPMENT CORPORATION WATSONVILLE, MASSACHUSETTS VT40 DISPLAY CONTROL (SDM)		
SIZE CODE		NUMBER		REV.
DCS		M7013-0-1		B

REV. NO. 1

REV. NO. 2

REV. NO. 3

REV. NO. 4

REV. NO. 5

REV. NO. 6

REV. NO. 7

REV. NO. 8

REV. NO. 9

REV. NO. 10

REV. NO. 11

REV. NO. 12

REV. NO. 13

REV. NO. 14

REV. NO. 15

REV. NO. 16

REV. NO. 17

REV. NO. 18

REV. NO. 19

REV. NO. 20

REV. NO. 1

REV. NO. 2

REV. NO. 3

REV. NO. 4

REV. NO. 5

REV. NO. 6

REV. NO. 7

REV. NO. 8

REV. NO. 9

REV. NO. 10

REV. NO. 11

REV. NO. 12

REV. NO. 13

REV. NO. 14

REV. NO. 15

REV. NO. 16

REV. NO. 17

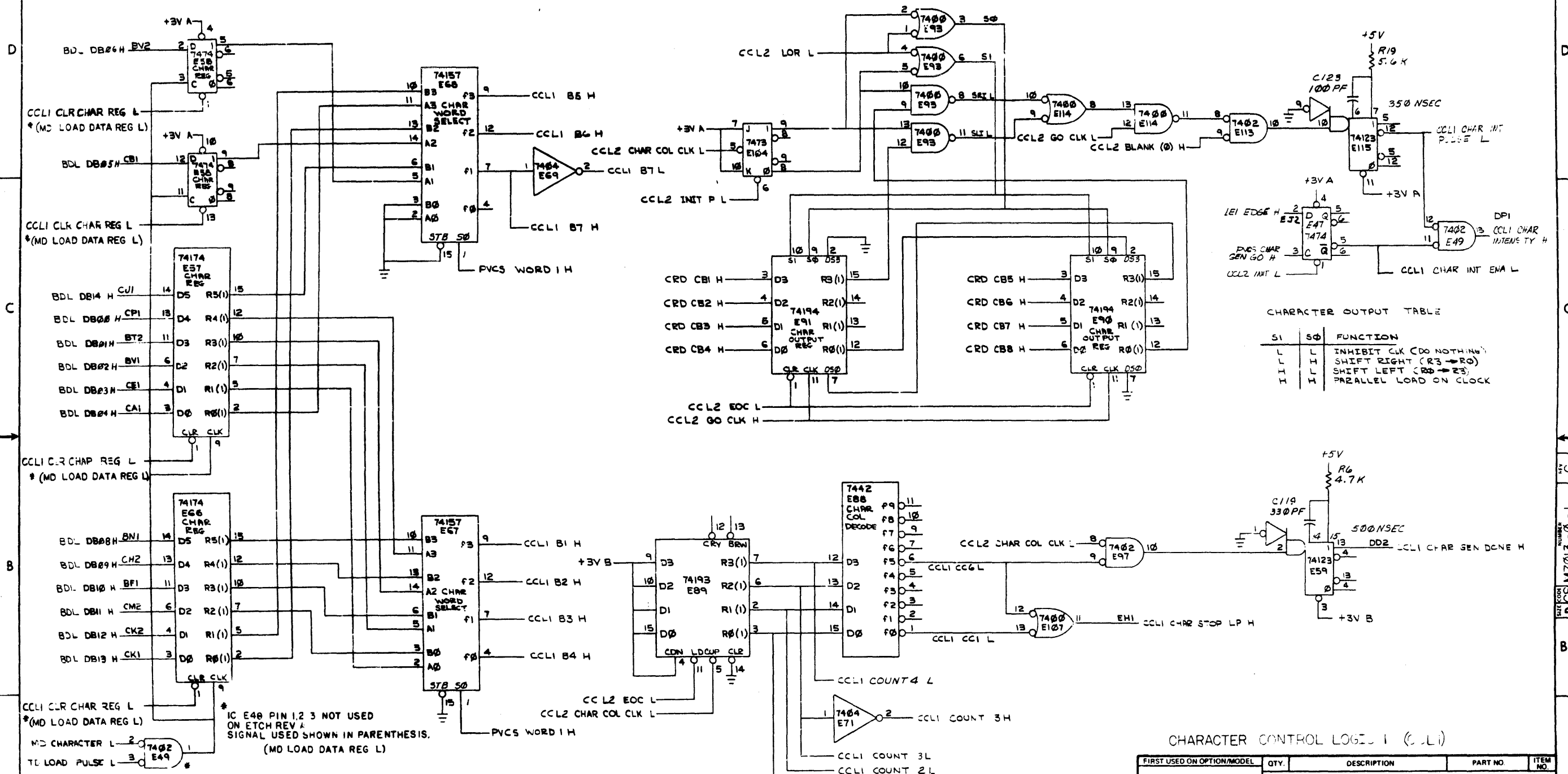
REV. NO. 18

REV. NO. 19

REV. NO. 20

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VT40 DISPLAY CONTROL (CCL1)



CHARACTER OUTPUT TABLE

S1	S0	FUNCTION
L	L	INHIBIT CLK (DO NOTHING)
L	H	SHIFT RIGHT (R3 → R0)
H	L	SHIFT LEFT (R0 → R3)
H	H	PARALLEL LOAD ON CLOCK

CHARACTER CONTROL LOGIC 1 (CCL1)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE	digital EQUIPMENT CORPORATION	
.XXX = .006	ANGLES	10-20-72	MAYNARD MASSACHUSETTS	
.XX = .02	±0° 30'	DATE	TITLE	
.X = .1		10-20-72	VT40 DISPLAY CONTROL (CCL1)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	SIZE CODE	
		11/3/72	NUMBER	
MATERIAL	NEXT HIGHER ASSY.		DCS M7013-0-1	
			REV.	
FINISH	SCALE		C	
	SHEET 2 OF		DIST.	

REVISIONS
CHANGE NO.
DATE

WD LOAD DATA REG H
BCL INIT H

CCL1 CLR CHAR REG L
CCL1 CLK CHAR REG L

CCL1 B5 H
CCL1 B6 H
CCL1 B7 L
CCL1 B7 H
CCL1 B1 H
CCL1 B2 H
CCL1 B3 H
CCL1 B4 H
CCL1 COUNT 4 L
CCL1 COUNT 3 H
CCL1 COUNT 3 L
CCL1 COUNT 2 L
CCL1 COUNT 1 L

CCL2 EOC L
CCL2 CHAR COL CLK L
CCL2 INIT P L
CCL2 GO CLK L
CCL2 GO CLK H

CCL2 LOR L
CCL2 GO CLK L
CCL2 BLANK (0) H
CCL2 EOC L
CCL2 GO CLK H

CCL2 CHAR COL CLK L
CCL1 CC6 L
CCL1 CCL L
CCL2 CHAR COL CLK L
CCL1 CC6 L
CCL1 CCL L

CCL1 CHAR INT PULSE L
CCL1 CHAR INT ENA L
CCL1 CHAR GEN DONE H
CCL1 CHAR STOP LP H

IC E40 PIN 1,2,3 NOT USED ON ETCH REV A SIGNAL USED SHOWN IN PARENTHESIS. (MD LOAD DATA REG L)

MD CHARACTER L
TL LOAD PULSE L

DRAWING NO. 222-15840

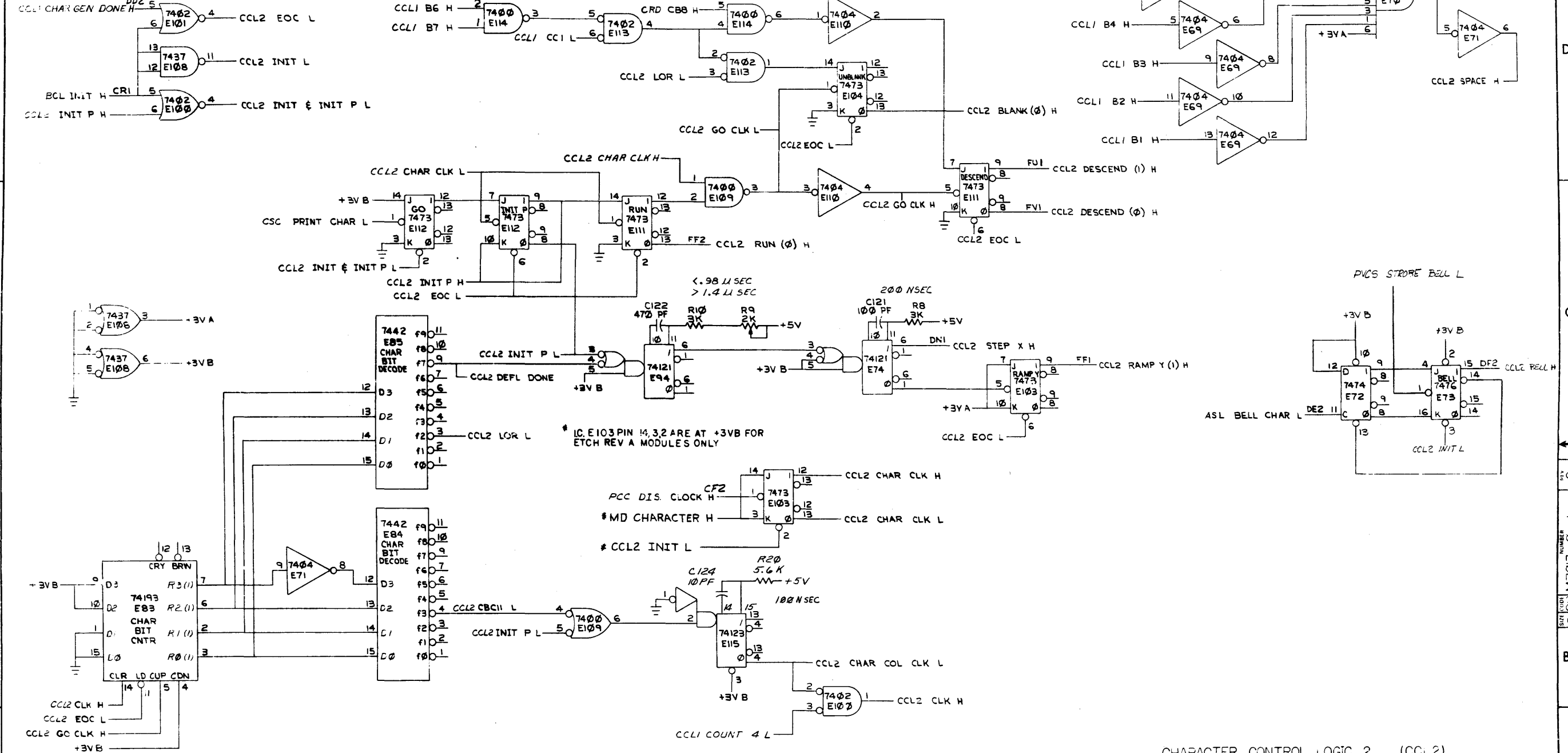
REV. C

DATE CODE DCS M7013-0-1

NUMBER 1

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CHARACTER CONTROL LOGIC 2 (CCL2)

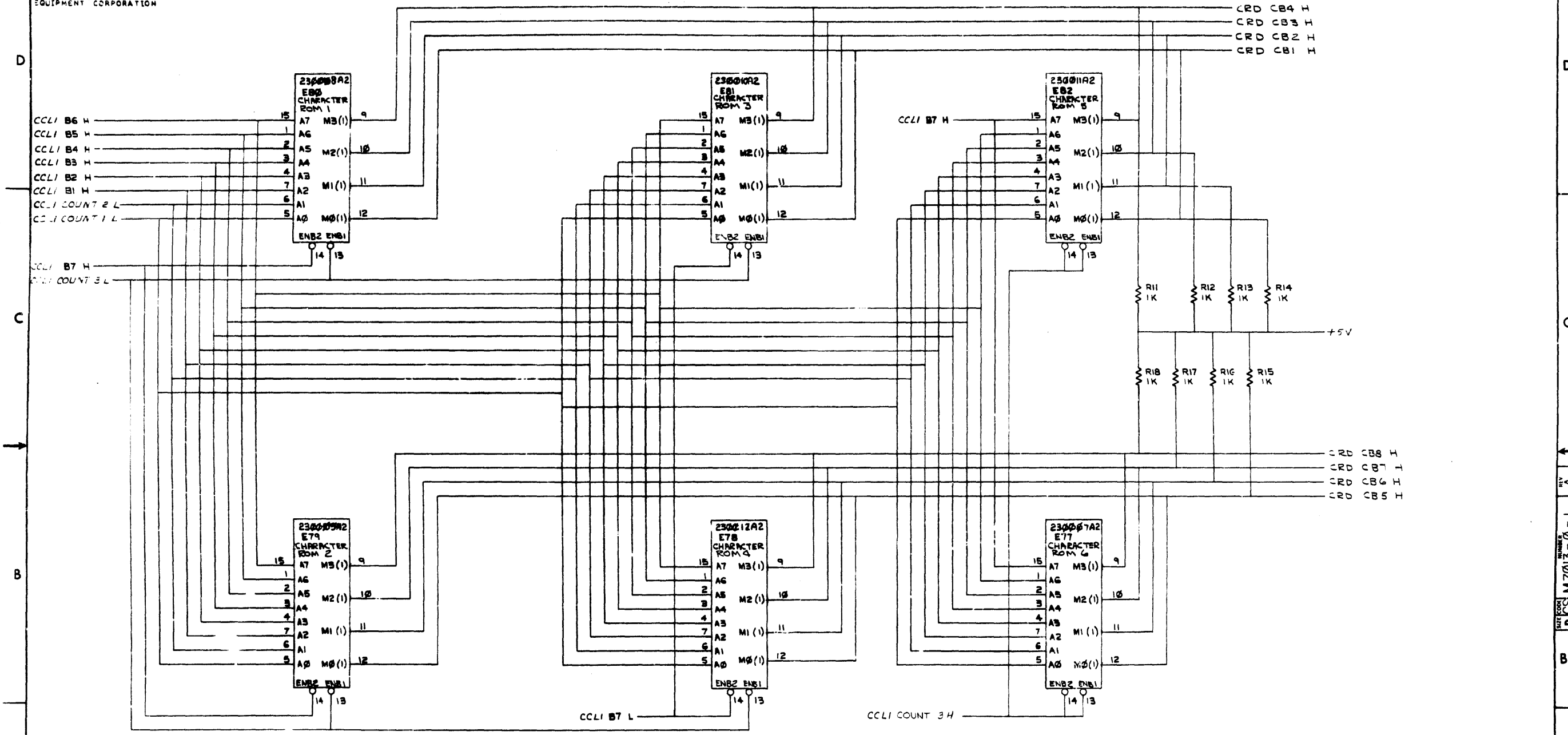
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN E.S. Hellen	DATE 12/1/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS .XXX ± .005	CHKD JIMMY MOORE	DATE 10/30/72	TITLE VT40 DISPLAY CONTROL (CCL2)	
ANGLES .XX ± .02	ENG J. Spanony	DATE 10/30/72	SIZE CODE D	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROJ ENG H. Schaefer	DATE 11/20/72	NUMBER M7013-0-1	
MATERIAL	PROD D.A. Gaudy	DATE 11/2/72	REV. C	
FINISH	NEXT HIGHER ASSY.	SCALE	SHEET 10 OF	
			DIST.	

REVISIONS
REV
CHANGE NO.

REV. C
NUMBER M7013-0-1
SHEET 10 OF

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CHARACTER ROMS DECODE (CRD)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN. <i>R. E. Hillen</i> CHK'D. <i>Nancy Moore</i> ENG. <i>J. J. ...</i> PROJ. ENG. <i>H. ...</i> RDD. <i>M. ...</i>	DATE 9/10/72 10/30/72 10/30/72 10/30/72 10/30/72	digital CORPORATION MAYFORD MASSACHUSETTS	
DECIMALS XXX - .008 XX - .02 X - .1	ANGLES ±0° 30'	TITLE VT40 DISPLAY CONTROL (CRD)		
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY	MATERIAL NEXT HIGHER ASSY.			
FINISH	SCALE SHEET 11 OF	SIZE CODE DGS M7013-0-1	NUMBER REV. A	

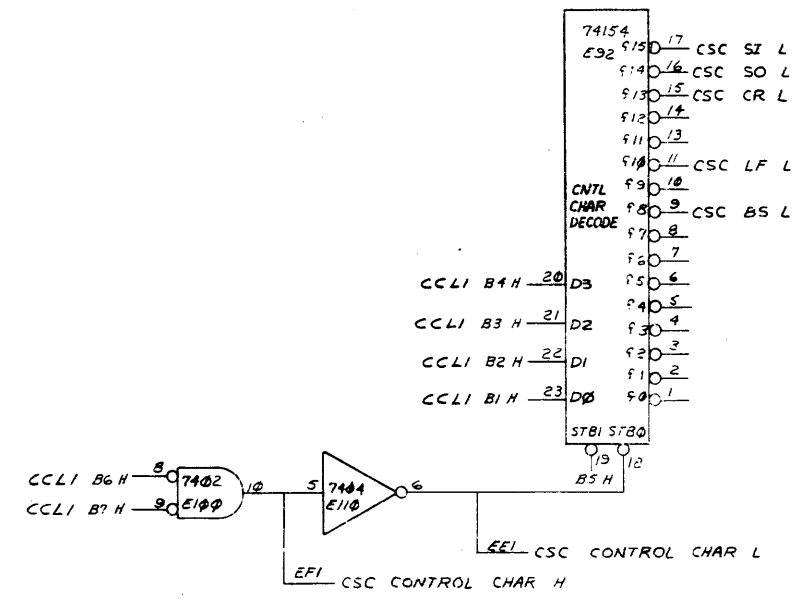
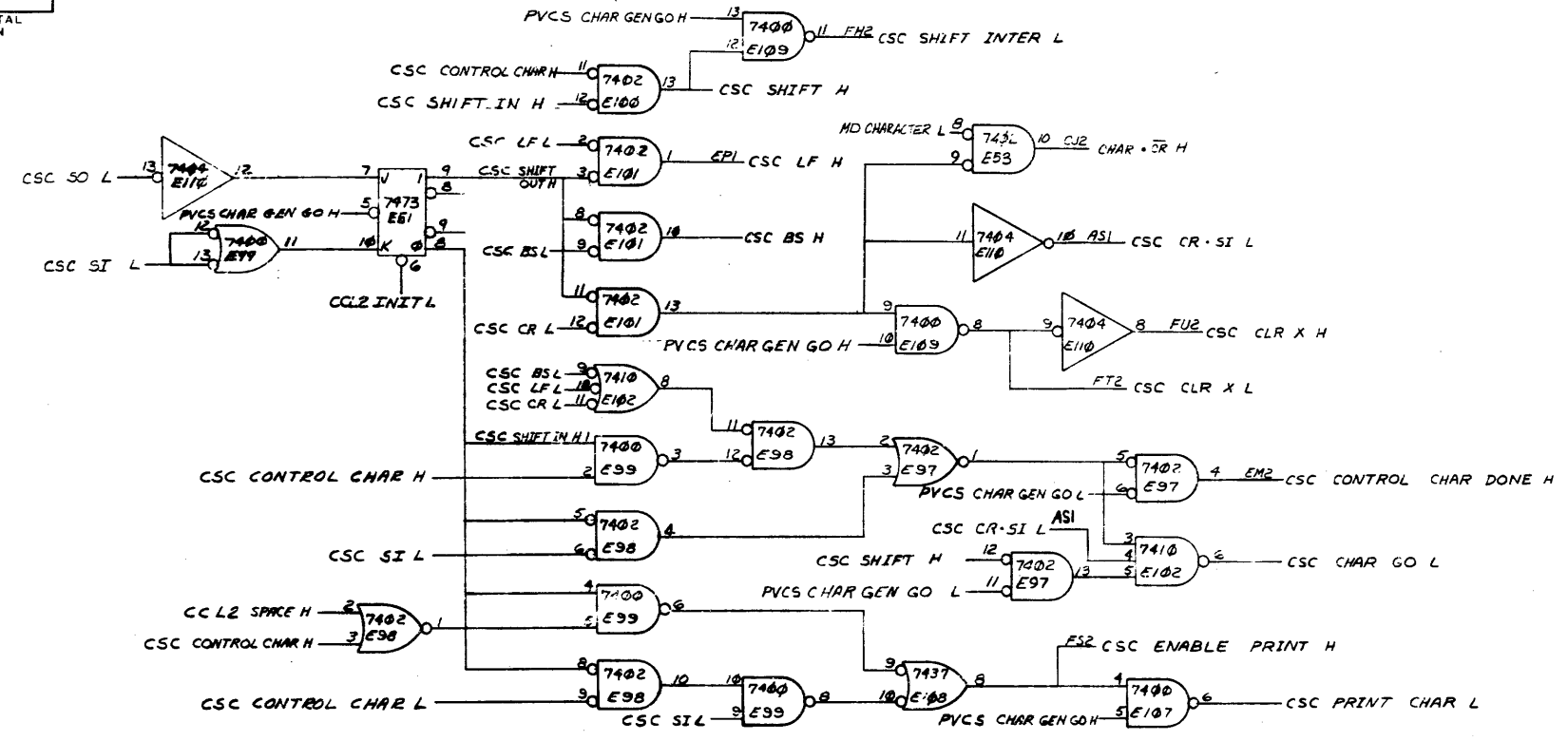
REV.	CHANGE NO.

DRD 102-2

DATE CODE: DCS M7013-0-1

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 1962



CONTROL & SPECIAL CHARACTERS (CSC)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>W. M. ...</i> CHK'D <i>W. M. ...</i>	DATE 7-1-72 DATE 10-30-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
DECIMALS .XXX + .005 .XX + .02 .X + .1	ANGLES ± 0' 30"	ENG <i>A. ...</i> PROJ. ENG. <i>H. E. ...</i>	DATE 10-30-72 DATE 11-13-72	TITLE VT40 DISPLAY CONTROL (CSC)
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY		PROD. <i>S. ...</i>	DATE 11-13-72	
MATERIAL //	NEXT HIGHER ASSY. //	SIZE CODE DCS	NUMBER M7013-0-1	REV. A
FINISH //	SCALE //	SHEET 12	DIST.	

REVISIONS
 NO. CHANGE NO.
 1
 2

SIZE CODE
 M7013-0-1
 NUMBER
 M7013-0-1
 REV.
 A

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS										REMARKS	
	A	B	C	D	E							
1	*	A	B	C	D	E						
2	*	A	A	A	B	C						
3	*	A	A	A	B	C						
4	*	A	*	*	*	A						ASL
5	*	A	*	*	*	A						BCL
6	*	A	A	A	A	A						PCC
7	*	A	*	*	*	A						VC1
8	*	*	*	*	*	*						VC2
9	*	*	*	*	*	*						LEI
10	*	*	*	*	*	*						BRL
11	*	*	*	*	*	*						BDL

DATE	ENG	ETCH REV.	ECO. NO.	OR. DATED
		B		
12/10/73	V.G.	B	1	
1/10/74	R.G.	B	2	
2/11/74	R.G.	B	3	
5/10/74	J.E.	B	4	
2/20/75	D.P.	B	5	

FIRST USED ON OPTION/MODEL
GT44

DRN. <i>J. Vincent</i>	DATE 10-1-73
CHK'D. <i>J. Vincent</i>	DATE 10/1/73
ENG. <i>J. Vincent</i>	DATE 10/16/73
PRO. ENG. <i>J. Vincent</i>	DATE 10/16/73
PROD. <i>J. Vincent</i>	DATE 10/16/73

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
BUS CONTROL & BOOTSTRAP

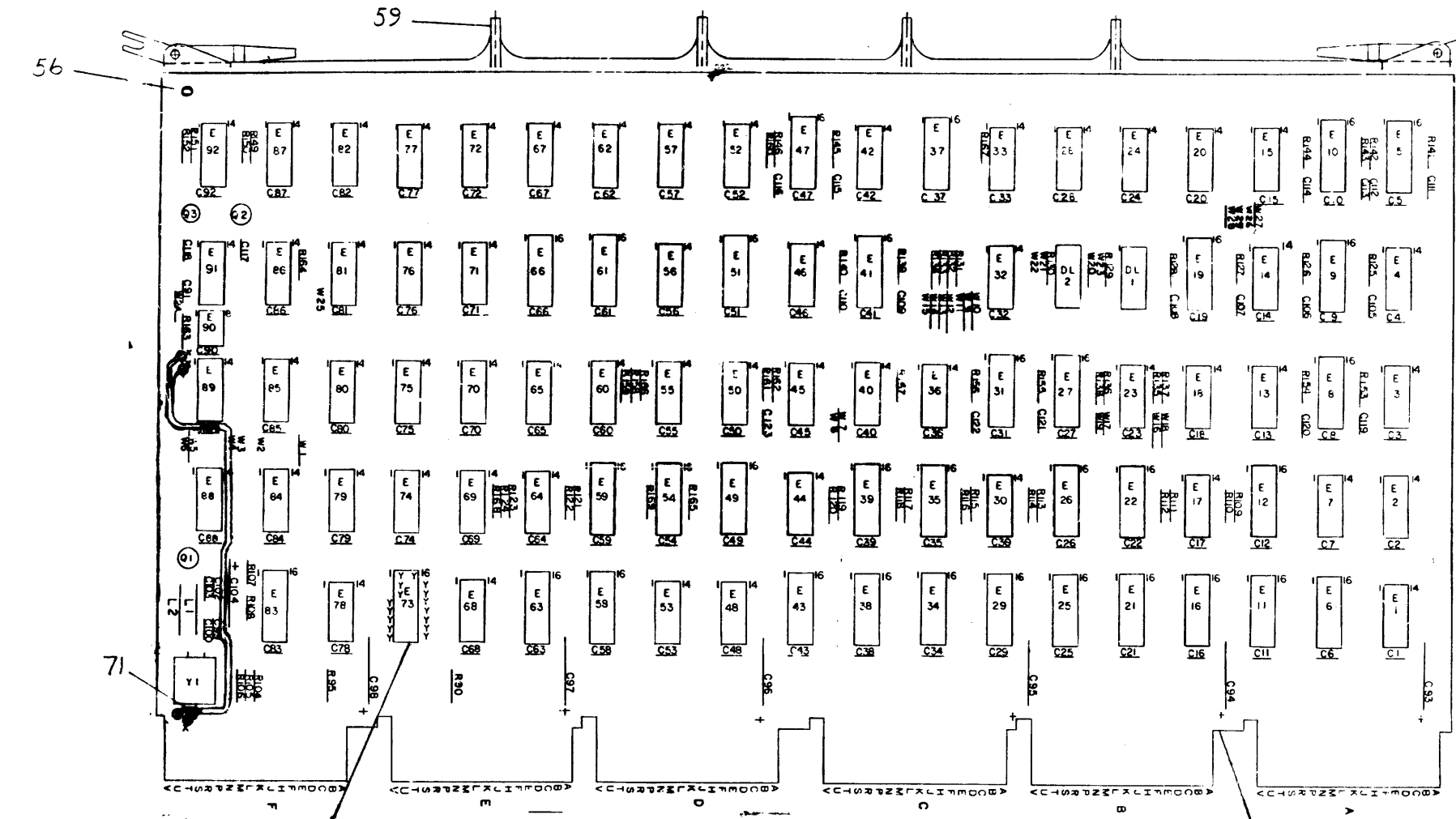
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NEXT HIGHER ASSY. B-DD-VT11-0		SIZE B	CODE CS	NUMBER M7014-YA-1	RFV. E
SCALE 1		DIST.			
SHEET 1 OF 11					

NOTES:

EDGE CUTOFF	BOOTSTRAP ROM SELECT 1 & 2	VECTOR INTERRUPT	INTENSITY DELAY	CHARACTER SPACING	INT CLOCK	ADDRESS SELECT
W1 = 1024 UNITS	W26 = DIS. 1	W8 = D08	W21 = 550 NS	W4 = 73 CHAR 40 LINES	W24 = INT.	W11 = A12 W18 = A05
W2 = 768 UNITS	W27 = ENA. 1	W7 = D07	W20 = 600 NS	W3 = 85 CHAR 40 LINES	W25 = EXT.	W13 = A09 W14 = A04
	W28 = ENA. 2	W10 = D06	W23 = 700 NS	W5 = 73 CHAR 43 LINES		W16 = A08 W17 = A23
	W29 = DIS. 2	W15 = D05	W22 = 1000 NS	W6 = 85 CHAR 43 LINES		W19 = A07 W17 = A26
		W9 = D04				

JUMPERS INSERT



REF	REF	X-Y COORDINATE HOLE LOCATION	ITEM NO
REF	REF	ASSY DRILLING HOLE LAYOUT	0-AN-07014-0-5
REF	REF	MODULE ECO HISTORY	0-AN-07014-0-5
1		ETCHED CIRCUIT BOARD	5010129
8	C100, C103, C107, C109, C115, C119, C121, C122	CAP 10 PF 5% 100V DM	1000006
2	C102, C110	CAP 100 PF 5% 100V DM	1000016
5	C105, C108, C120, C106, C111	CAP 330 PF 5% 100V DM	1000023
2	C117, C118	CAP 560 PF 5% 100V DM	1000025
6	C93 THRU C98	CAP 6 BUF 10% 35V TANT	1005308
2	C99, C123	CAP 01UF 20% 100V	1001610-01
1	C104	CAP 15UF 10% 20V	1004812
91	C1 THRU C12, C74 THRU C92	CAP 01UF AXIAL LEAD	1001610
1	R161	RES 330 5% 1/4W	1300295
6	R105, R150, R151, R158, R166, R169	RFS 390 5% 1/4W	1300309
28	R109 THRU R124, R131 THRU R138, R157, R164, R167, R168	RES 1K 5% 1/4W	1300365
8	R128, R127, R139, R142, R145, R153, R155, R156	RES 4.7K 5% 1/4W	1300447
12	R107, R104, R106, R129, R130, R149, R152, R160, R165, R165, R165	BES 180 5% 1/4W	1301322
1	R162	RES 750 5% 1/4W	1301401
5	R125, R140, R141, R143, R154	RES 22K 5% 1/4W	1301808
1	R108	RES 100K 5% 1/4W	1302466
2	Q2, Q3	TRANS. DEC 3009B	1503100
1	Q1	TRANS 2N5245	1509681
1	L2	COIL 2.2MH	1602912
1	L1	COIL 2.2UH	1609620
2	DL1, DL2	DELAY LINE L1842	1611197
1	Y1	CRYSTAL 20.0 MC	1P09880-0
3	E28, E42, E77	I.C. DEC 7474	1905547
11	E2, E14, E15, E57, E70, E71, E72, E75, E80, E82, E89	I.C. DEC 7400	1905575
1	E13	I.C. DEC 7410	1905576
1	E68	I.C. DEC 7453	1905582
4	E37, E51, E61, E66	I.C. DEC 7476	1905585
13	E4, E7, E32, E33, E46, E62, E67, E74, E78, E79, E85, E86, E88	I.C. DEC 7402	1909004
2	E40, E56	I.C. DEC 74H21	1909058
2	E1, E55	I.C. DEC 8640 (REPLACES 3-81)	1911409
7	E3, E18, E50, E60, E69, E76, E84	I.C. DEC 7404	1909686
1	E48	I.C. DEC 514	1909704
11	E45, E52, E53, E65, E87, E91, E92, E17, E30, E44, E64	I.C. DEC 8001	1909705
2	E23, E36	I.C. DEC 8242	1909712
4	E11, E25, E38, E58	I.C. DEC 74193	1910018
1	E20	I.C. DEC 7437	1910091
1	E19	I.C. DEC 2602	1910257
1	E27	I.C. DEC 7496	1910363
1	E90	I.C. DEC 75451	1910406
7	E5, E8, E9, E10, E31, E41, E47	I.C. DEC 74123	1910436
1	E24	I.C. DEC 7427	1910878
7	E6, E16, E21, E29, E34, E43, E83	I.C. DEC 8038 OR LM331	1911117

8839	9	16
75451	4	8
74193	8	16
74157	8	16
7496	12	5
7476	13	5
5603	8	16
2602	8	16
8640	1	8
514	1	8
IC TYPE	GND	+5V

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

IC PIN LOCATIONS

AC2, AE2, AT1, BB2, BC2, BT1, CB2, CC2, CN2, CT1, DC2, DT1, EC2, ET1, FT2, FT1

FIRST USED ON OPTION MODEL: GT44

ETCH BOARD REV: B

REVISIONS:

CHG	NO	REV	DATE	BY
215245	1	SYME		
DEC 30 1972	2	215245		

SEMICONDUCTOR CONVERSION CHART

DRN: [Signature] DATE: 1/2/73

CHKD: [Signature] DATE: 1/2/73

ENGR: [Signature] DATE: 1/2/73

PROL: [Signature] DATE: 1/2/73

APP: [Signature] DATE: 1/2/73

TITLE: BUS CONTROL & BOOTSTRAP

SCALE: 1:1

SHEET: 01 OF 01

DIST: [Blank]

D
C
B

D
C
B

A

A

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NOTES:

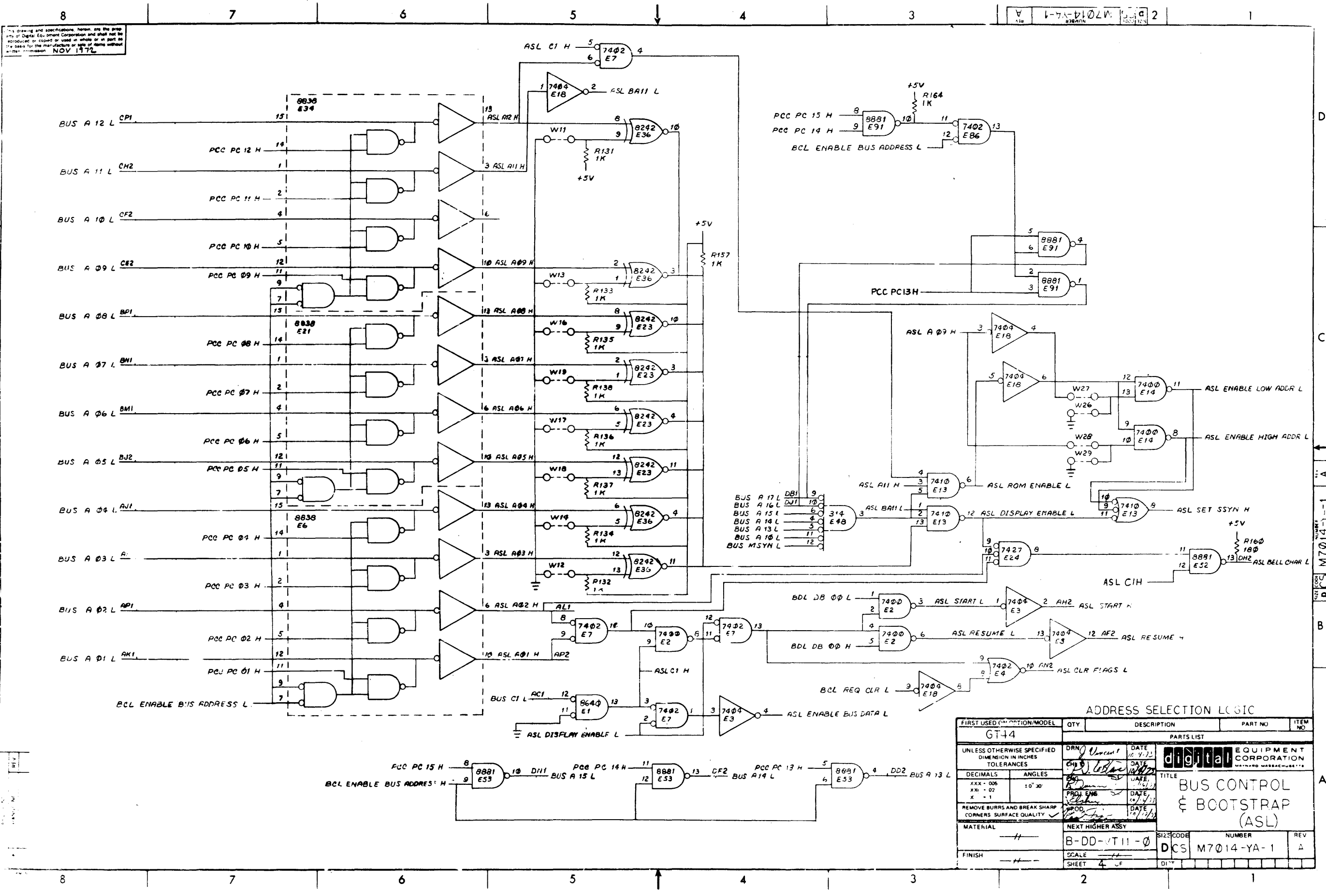
1. THE FOLLOWING ITEMS ARE CUSTOMER OPTIONS, DO NOT INSERT: E12, E17, E22, E26, E30, E35, E39, E44, E49, E54, E59, E64, W2, W3, W4, W6, W8, W9, W11, W15, W21, W22, W23, W25, W27 & W28.

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.
16	W1,5,7,0,2,13,14,16,17, 18,19,20,24,9,27,28	INSULATED JUMPER	L-2007-1 9009135	49
1	E81	I.C. DEC 74674	1910544	54
1	E73	PRIORITY JUMPER (LEVEL 4) PLUG	5408778	55
12		EYELET GS-4-7	9006732	56
1		COAX CABLE RG174U 6 IN. LG	9107530	58
1		HANDLE ASSY MODULE	1210711-2	59
REF		BOOT STRAP ROM PATTERNS	K-PL-M7814-0-0	60
2	C113, C112	CAP 180 PF 5% 100V	1000020	61
1	R163	RES 47 OHM 5% 1/4W	1300202	62
3	R126, R144, R146	RES 68K OHM 5% 1/4W	1301327	63
2	C114, C116	CAP 1000.0 MMF 100V 5% D.W.	1000042	64
1	(E73)	I.C. SOCKET	1209839	65
1	E12	IC DEC IM6300 OR 74187	23053A2	66
1	E22	IC DEC IM6300 OR 74187	23054A2	67
1	E26	IC DEC IM6300 OR 74187	23055A2	68
1	E35	IC DEC IM6300 OR 74187	23056A2	69
4		SPLIT LUG	9006735	70
AP		TUBING	9107295-10	71
1	E39	IC DEC IM6300 OR 74187	23057A2	72
1	E49	IC DEC IM6300 OR 74187	23058A2	73
1	E54	IC DEC IM6300 OR 74187	23059A2	74
1	E59	IC DEC IM6300 OR 74187	23060A2	75

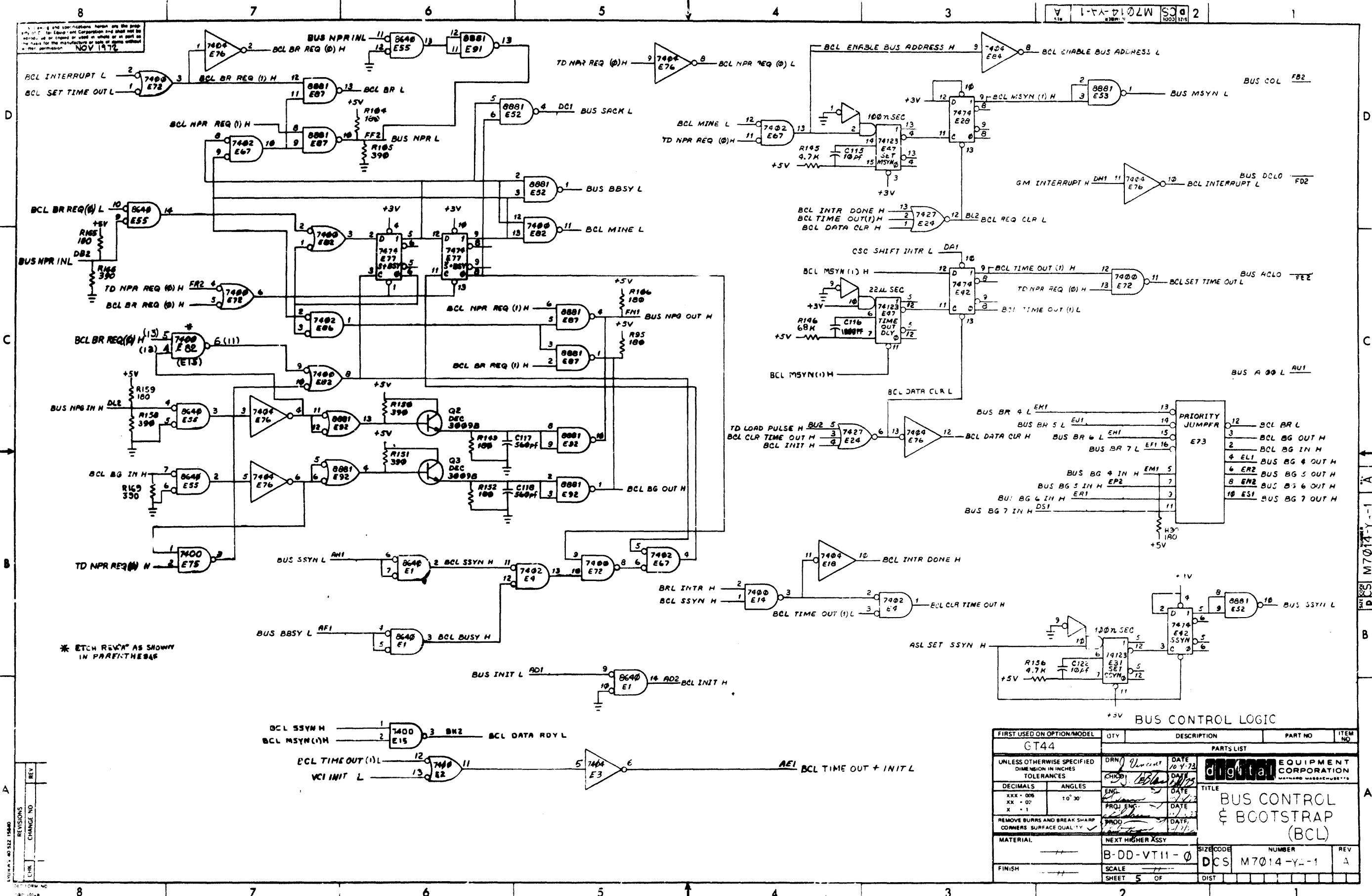
FIRST USED ON OPTION MODEL		GT44	
ETCH BOARD REV		B	
DRN	DATE	DIGITAL EQUIPMENT CORPORATION	
CHK'D	DATE	TITLE	
ENG	DATE	BUS CONTROL & BOOTSTRAP	
PROB'G	DATE	NEXT HIGHER ASSY	
APP'D	DATE	R CD-VIII-0	
DEC NO	EIA NO	DEC NO	EIA NO
SEMICONDUCTOR CONVERSION CHART		SCALE	SHEET 3 OF 3
SIZE CODE		NUMBER	REV
D CS M7014-YA-1			C

SIZE CODE: D CS M7014-YA-1
 NUMBER: C



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ADDRESS SELECTION LOGIC			
FIRST USED (LOCATION/MODEL)	QTY	DESCRIPTION	PART NO
GT-4			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES			
DECIMALS	ANGLES	TITLE	
XXX - 006	10' 30"	BUS CONTROL & BOOTSTRAP (ASL)	
XXI - 02		REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	
MATERIAL		NEXT HIGHER ASSY	REV
FINISH		B-DD-VT11-0	A
SCALE		SIZE CODE	NUMBER
SHEET 4 OF 4		DCS	M7014-YA-1



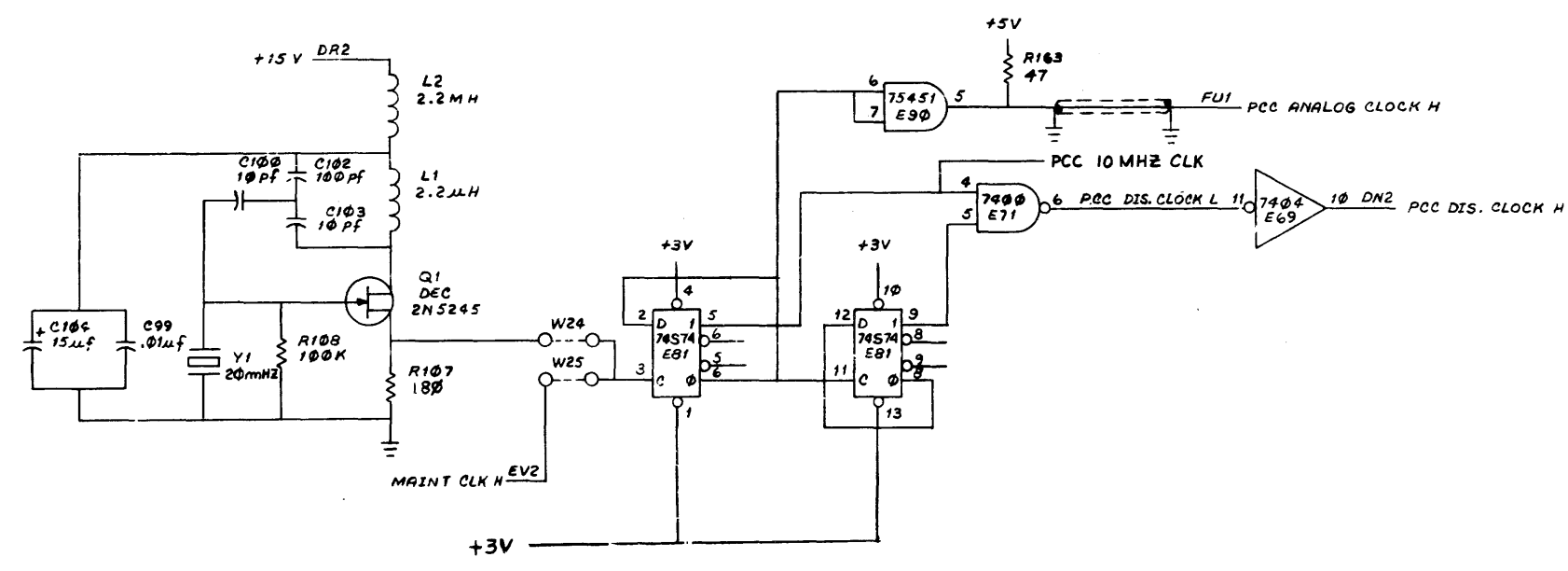
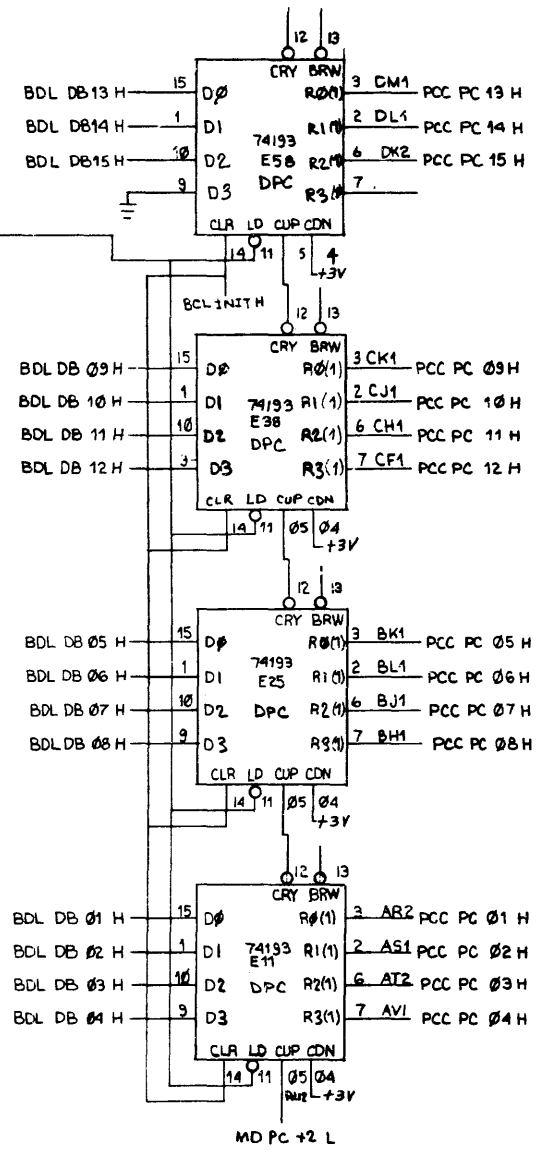
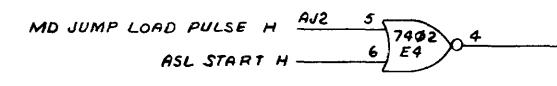
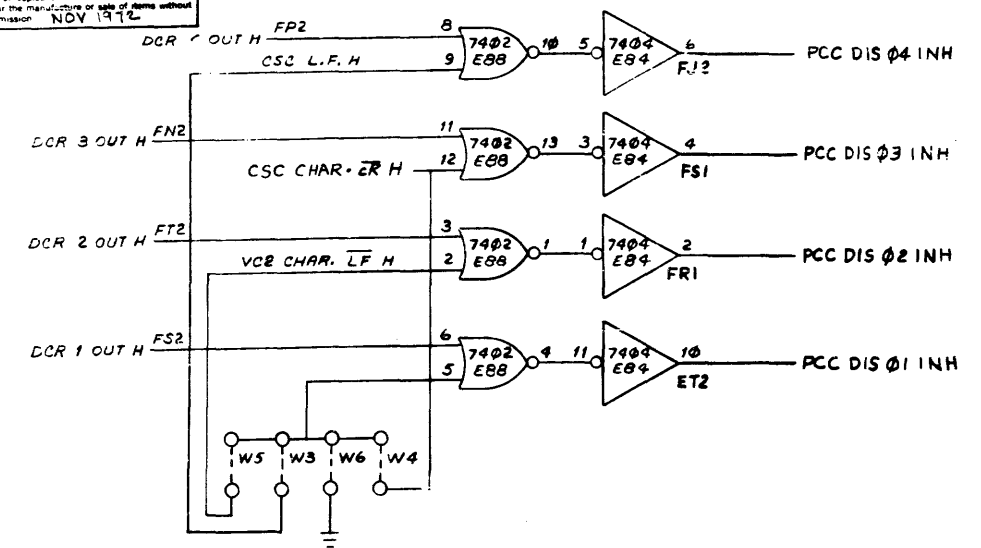
* ETCH REVISION AS SHOWN IN PARENTHESES

BUS CONTROL LOGIC

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
GT44				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED				
DIMENSION IN INCHES				
TOLERANCES				
DECIMALS	ANGLES	ENG.	DATE	TITLE
XXX - 008	10' 30"	PROJ. ENG.	DATE	BUS CONTROL & BOOTSTRAP (BCL)
XX - 00		PROD.	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY		SIZE CODE	NUMBER
FINISH	B-DD-VT11-0		DCS	M7014-Y-1
SCALE			SHEET	REV
SHEET 5 OF			DIST	A

REVISIONS
CHECK
CHANGE NO.

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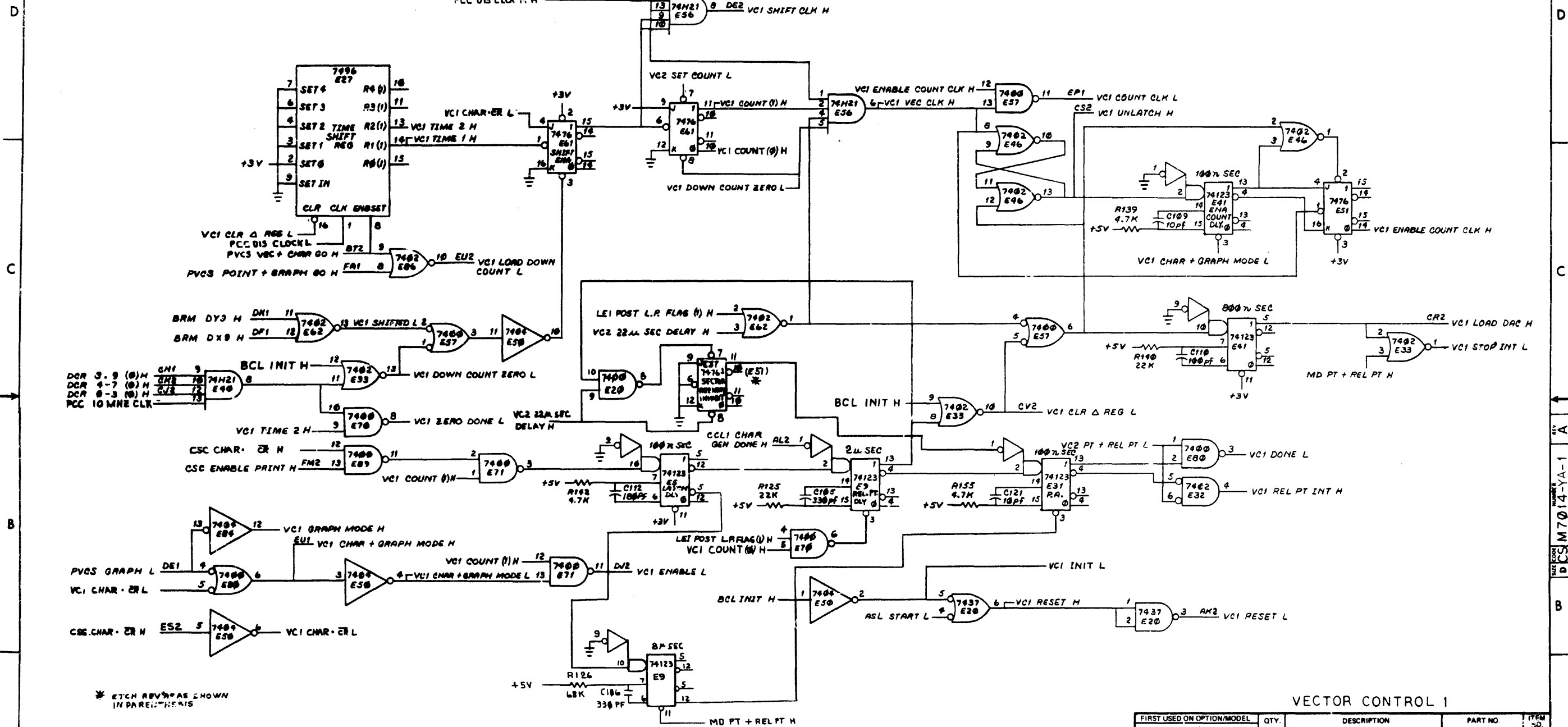


PROGRAM COUNTER AND CLOCK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT44				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
XXX - .005	± 0° 30'	DRN. <i>J. V...</i>	DATE 10-4-73	<p>TITLE BUS CONTROL & BOOTSTRAP (PCC)</p>
XX - .02		CHKD. <i>C. P...</i>	DATE 10/17/73	
X - .1		ENG. <i>C. P...</i>	DATE 10/17/73	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD. <i>C. P...</i>	DATE 10/17/73	
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SCALE		
		SHEET 6 OF		
		DIST.		

REVISIONS
 1. CHANGE NO.
 DATE

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* ETCH REV'S AS SHOWN IN PARENTHESIS

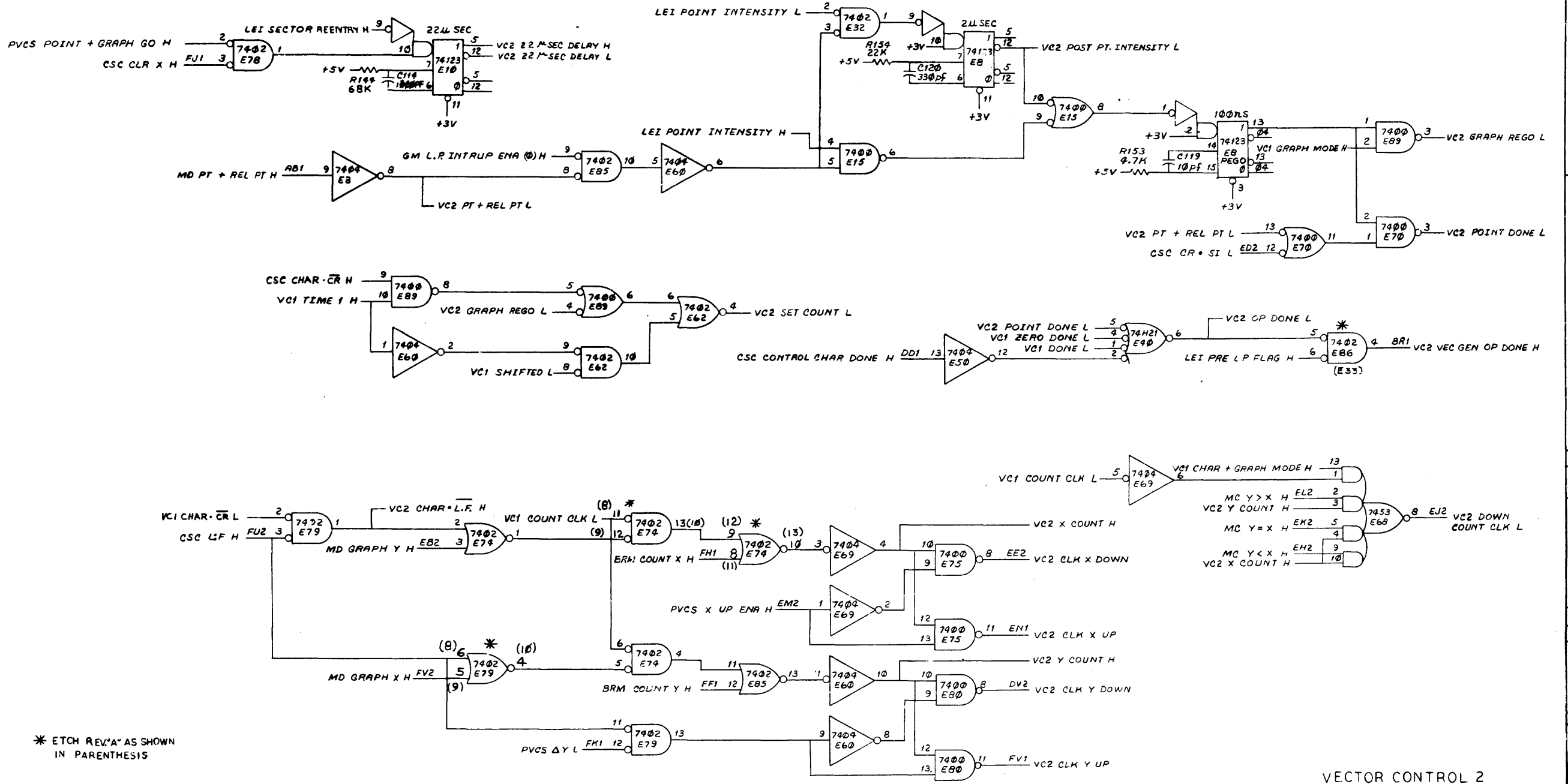
VECTOR CONTROL 1

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT44				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN <i>J. Daniels</i> DATE 10-4-73	DATE 10-4-73	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS ANGLES	CHKD <i>J. E. Blum</i> DATE 10/1/73	DATE 10/1/73		
XAX - .008 XX - .02 X - .1	ENG <i>J. Daniels</i> DATE 10/1/73	DATE 10/1/73	TITLE BUS CONTROL & BOOTSTRAP (VCI)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROJ ENG <i>J. Daniels</i> DATE 10/1/73	DATE 10/1/73		
MATERIAL	NEXT HIGHER ASSY.	SCALE	SIZE CODE	NUMBER
FINISH	B-DD-V	SHEET 7 OF	DCS M7014-YA-1	REV. A

REV	
CHANGE NO	
DATE	
BY	

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* 1-VA-1 101 M7014-VA-1 2

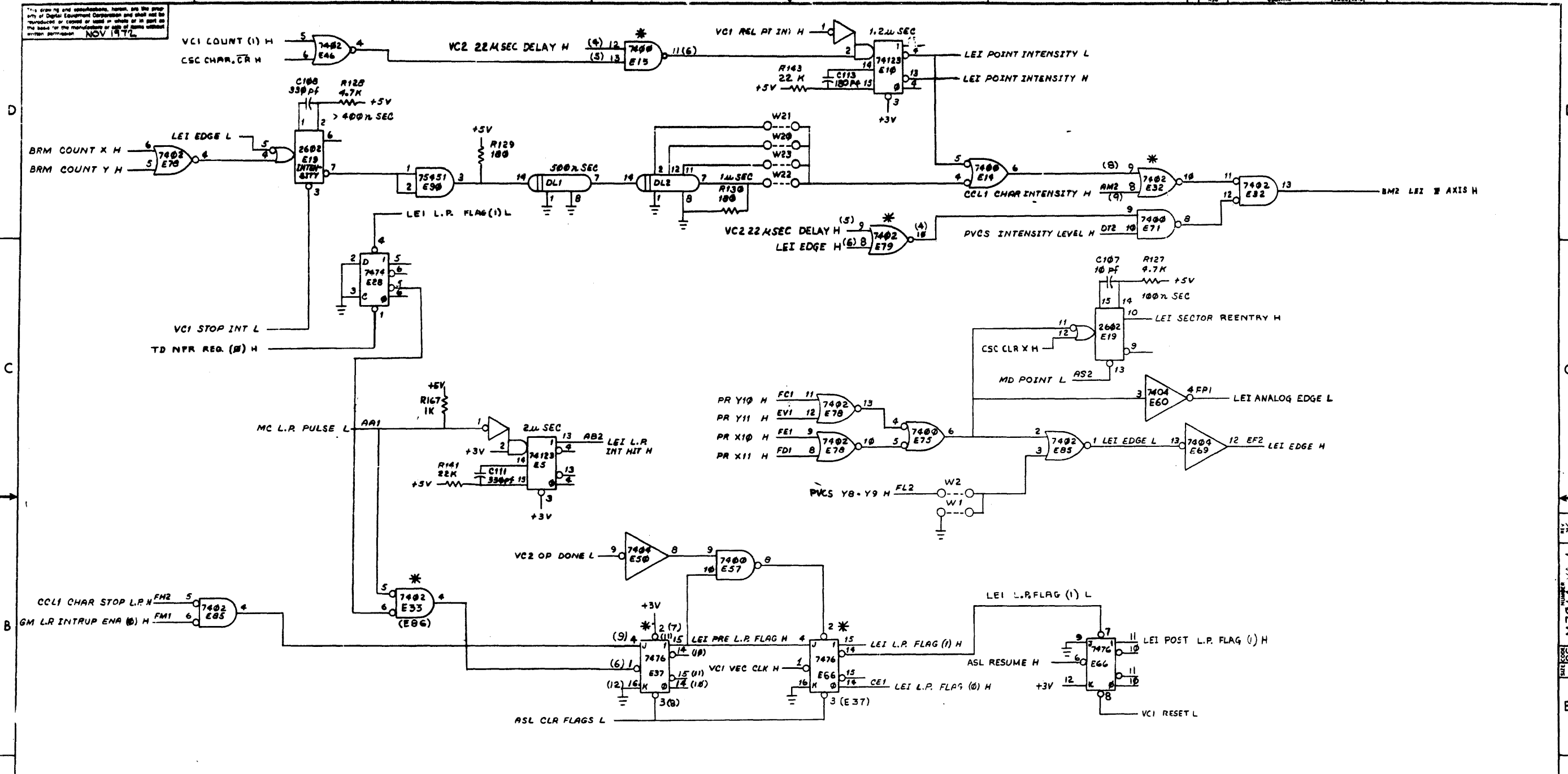


* ETCH REV 'A' AS SHOWN IN PARENTHESIS

VECTOR CONTROL 2

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO.
GT44				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN	DATE	digital EQUIPMENT CORPORATION	
DECIMALS	ENG	DATE	TITLE	
ANGLES	PROL ENG	DATE	BUS CONTROL & BOOTSTRAP (VC2)	
XXX - 005 XX - 02 X - 1	PROD	DATE	SIZE CODE NUMBER REV.	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			B-DD-VT11-0 DCS M7014-VA-1 *	
MATERIAL	NEXT HIGHER ASSY.		SCALE	
FINISH			SHEET 8 OF DIS:	

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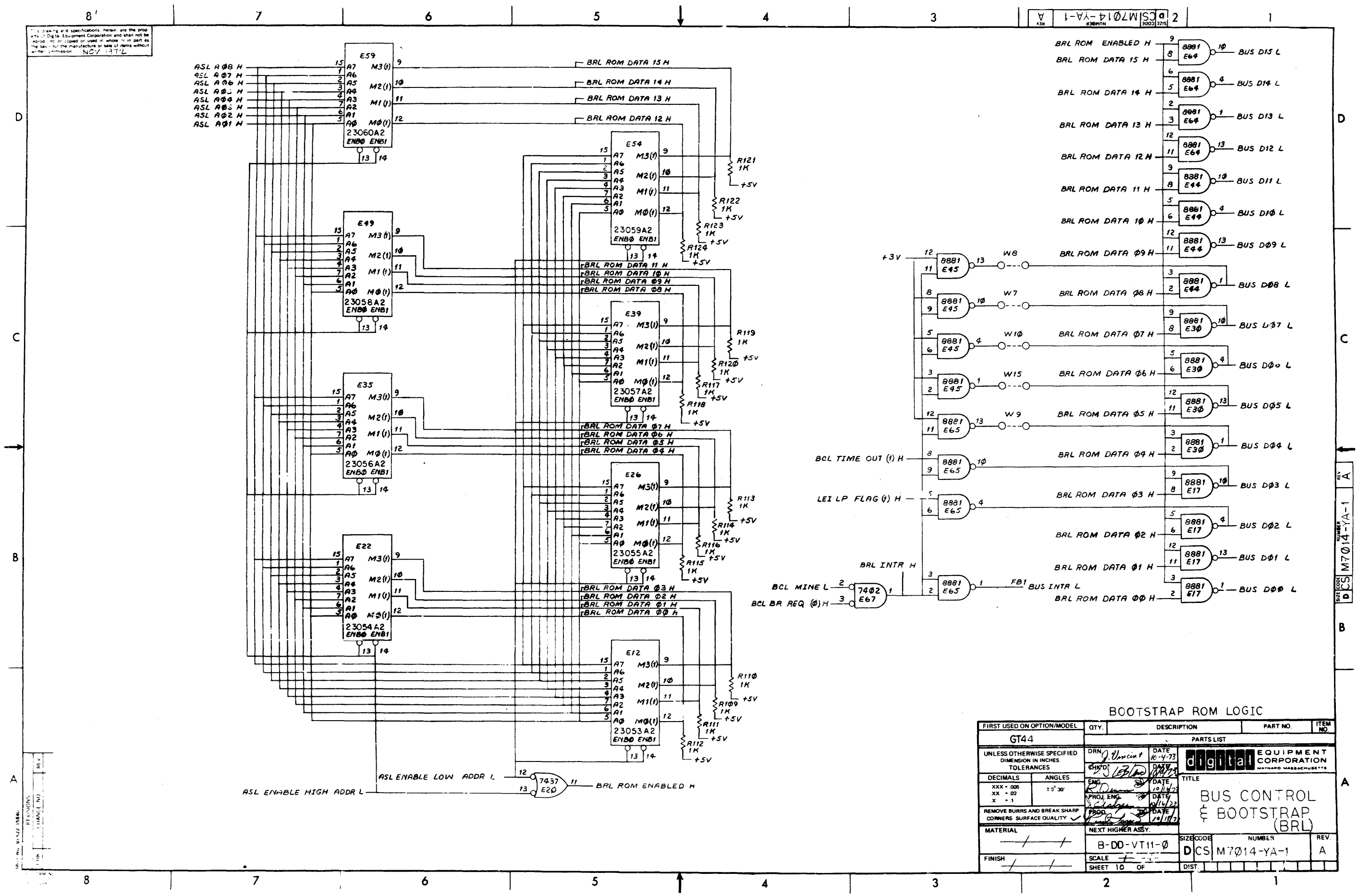
* ETCH REV'S AS SHOWN IN PARENTHESIS

LIGHT PEN, EDGE AND INTENSITY LOGIC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT44				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>J. Vincent</i> DATE 10-14-73	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	ANGLES	DATE 10/16/73		
XXX - .005	10° 30'	DATE 10/16/73	TITLE BUS CONTROL & BOOTSTRAP (LEI)	
XX - .02		DATE 10/16/73		
X - .1		DATE 10/16/73		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE 10/16/73		
MATERIAL	NEXT HIGHER ASSY.	DATE 10/16/73		
FINISH	B-DD-VT11-0	DATE 10/16/73	SIZE CODE	NUMBER
	SCALE	DATE 10/16/73	DCS	M7014-YA-1
	SHEET 9	DATE 10/16/73	DIST	REV. *

REV. NO. 1
REV. NO. 2
REV. NO. 3
REV. NO. 4
REV. NO. 5
REV. NO. 6
REV. NO. 7
REV. NO. 8
REV. NO. 9
REV. NO. 10
REV. NO. 11
REV. NO. 12
REV. NO. 13
REV. NO. 14
REV. NO. 15
REV. NO. 16
REV. NO. 17
REV. NO. 18
REV. NO. 19
REV. NO. 20

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BOOTSTRAP ROM LOGIC

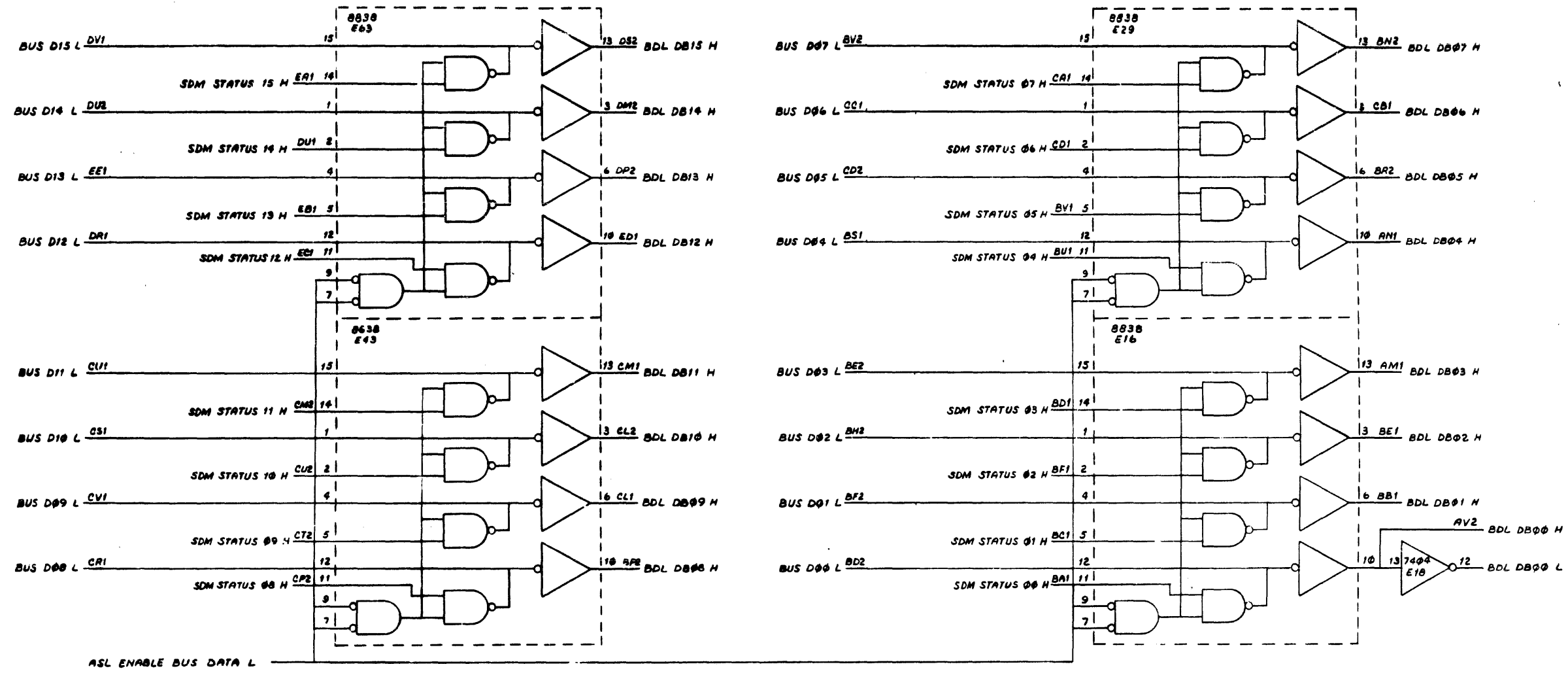
Table with columns: FIRST USED ON OPTION/MODEL, QTY., DESCRIPTION, PART NO., ITEM NO. Includes a parts list for GT44 and a title block for 'BUS CONTROL & BOOTSTRAP (BRL)'.

REV. NO. DATE BY

REV. NO. DATE BY

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DCS M7014-YA-1



REV
CHANGE NO
DATE

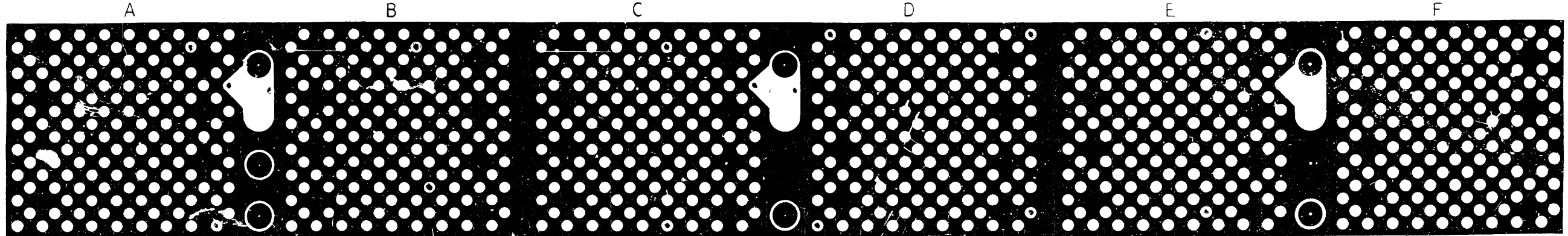
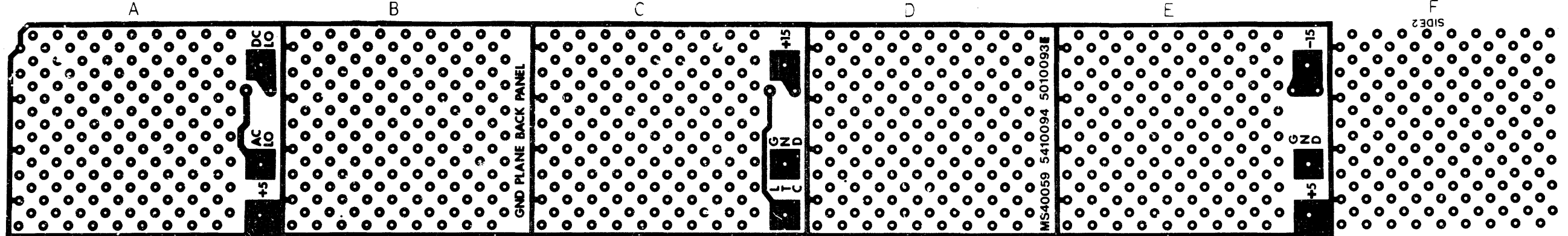
BUS DATA LINES

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT44				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		PARTS LIST		
DECIMALS	ANGLES	TITLE		
XX - .008	± 0° 30'	BUS CONTROL & BOOTSTRAP (BDL)		
XX - .02		EQUIPMENT CORPORATION		
X - .1		MAYNARD MASSACHUSETTS		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE		
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SCALE		
		SHEET 11		
		DIST.		
		REV. *		

DCS M7014-YA-1

NOTES:

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IC TYPE	GND	+5V

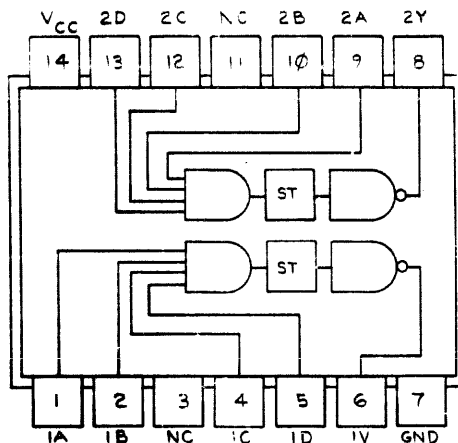
IC PIN LOCATIONS

1	ETCHED CIRCUIT BOARD	5010093	4	
REF	MODULE ECO HISTORY	B-MH-5410094-0-3	3	
REF	ASSY/DRILLING HOLE LAYOUT	F-MH-5410094-0-5	2	
REF	X-Y COORDINATE HOLE LOCATION	K-CO-5410094-0-4	1	
QTY	REF DESIGNATION	DESCRIPTION	PART NO	ITEM NO
FIRST USED ON OPTION MODEL				
PDPII				
PARTS LIST				
ETCH BOARD REV E				
DRN	DATE	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS		
CHK'D	DATE	TITLE		
ENGR	DATE	CIRCUIT SCHEMATIC		
PROJ. ENGR	DATE	NEXT HIGHER ASSY		
PROD	DATE	0 12-7009152-0-0		
DEC NO	EIA NO	DEC NO	EIA NO	
SEMICONDUCTOR CONVERSION CHART				
SCALE				
SHEET	OF			

REV 2
 NUMBER 5410094-0-1

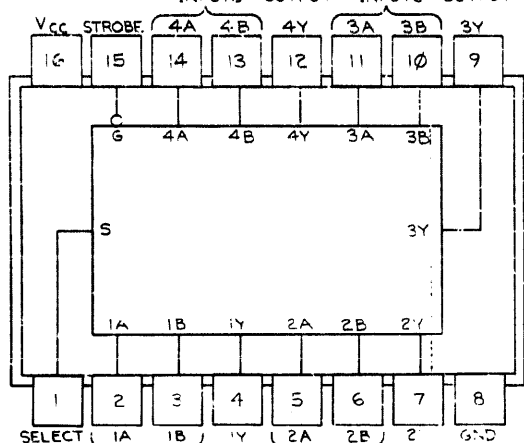
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SN7413
190995B
DUAL NAND SCHMITT TRIGGER



POSITIVE LOGIC $Y = \overline{ABCD}$

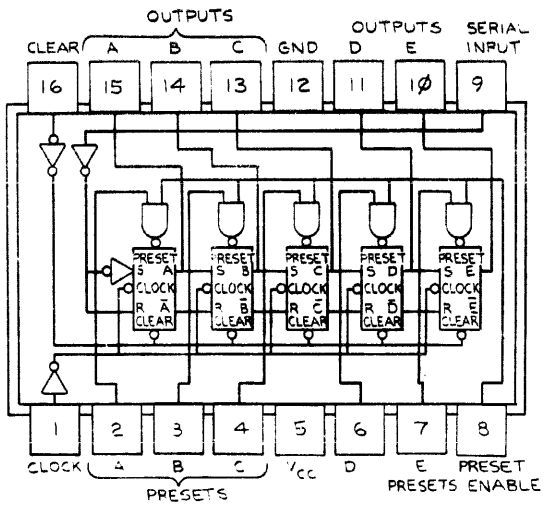
SN74157
1910655
QUAD 2 TO 1 MULTIPLEXER



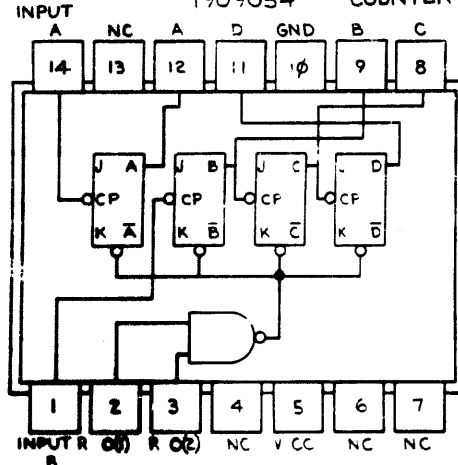
INPUTS		OUTPUT	
STROBE	SELECT	A	B
H	X	X	X
L	L	X	X
L	L	X	L
L	H	X	L
L	H	X	H

POSITIVE LOGIC:
LOW LOGIC LEVEL AT S SELECTS A INPUTS.
HIGH LOGIC LEVEL AT S SELECTS B INPUTS.

SN7496
1910363
5-BIT
SHIFT REG.

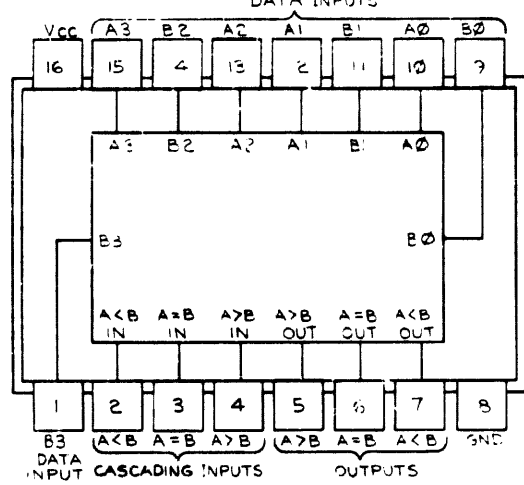


SN7493
1909054
4-BIT BINARY COUNTER



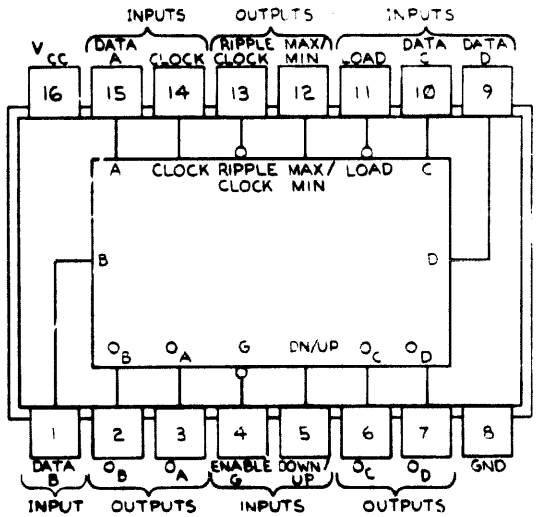
COUNT	OUTPUT			
	Q ₀	Q ₁	Q ₂	Q ₃
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

SN7485
1910224
4-BIT MAGNITUDE COMPARATOR



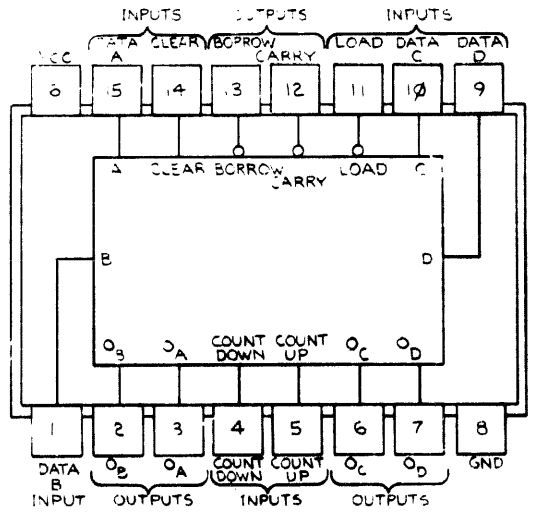
COMPARING INPUTS		CASCADED INPUTS		OUTPUTS					
A ₃ B ₃	A ₂ B ₂	A ₁ B ₁	A ₀ B ₀	A > B	A < B	A = B	A < B	A = B	
A ₃ > B ₃	X	X	X	X	X	X	H	L	L
A ₃ < B ₃	X	X	X	X	X	X	L	L	L
A ₃ = B ₃	A ₂ > B ₂	X	X	X	X	X	H	L	L
A ₃ = B ₃	A ₂ < B ₂	X	X	X	X	X	L	L	L
A ₃ = B ₃	A ₂ = B ₂	A ₁ > B ₁	X	X	X	X	H	L	L
A ₃ = B ₃	A ₂ = B ₂	A ₁ < B ₁	X	X	X	X	L	L	L
A ₃ = B ₃	A ₂ = B ₂	A ₁ = B ₁	A ₀ > B ₀	X	X	X	H	L	L
A ₃ = B ₃	A ₂ = B ₂	A ₁ = B ₁	A ₀ < B ₀	X	X	X	L	L	L
A ₃ = B ₃	A ₂ = B ₂	A ₁ = B ₁	A ₀ = B ₀	H	L	L	H	L	L
A ₃ > B ₃	A ₂ = B ₂	A ₁ = B ₁	A ₀ = B ₀	L	L	L	L	L	H
A ₃ < B ₃	A ₂ = B ₂	A ₁ = B ₁	A ₀ = B ₀	L	L	L	L	L	H

SN74191
1910096
SYNC UP/DWN COUNTER



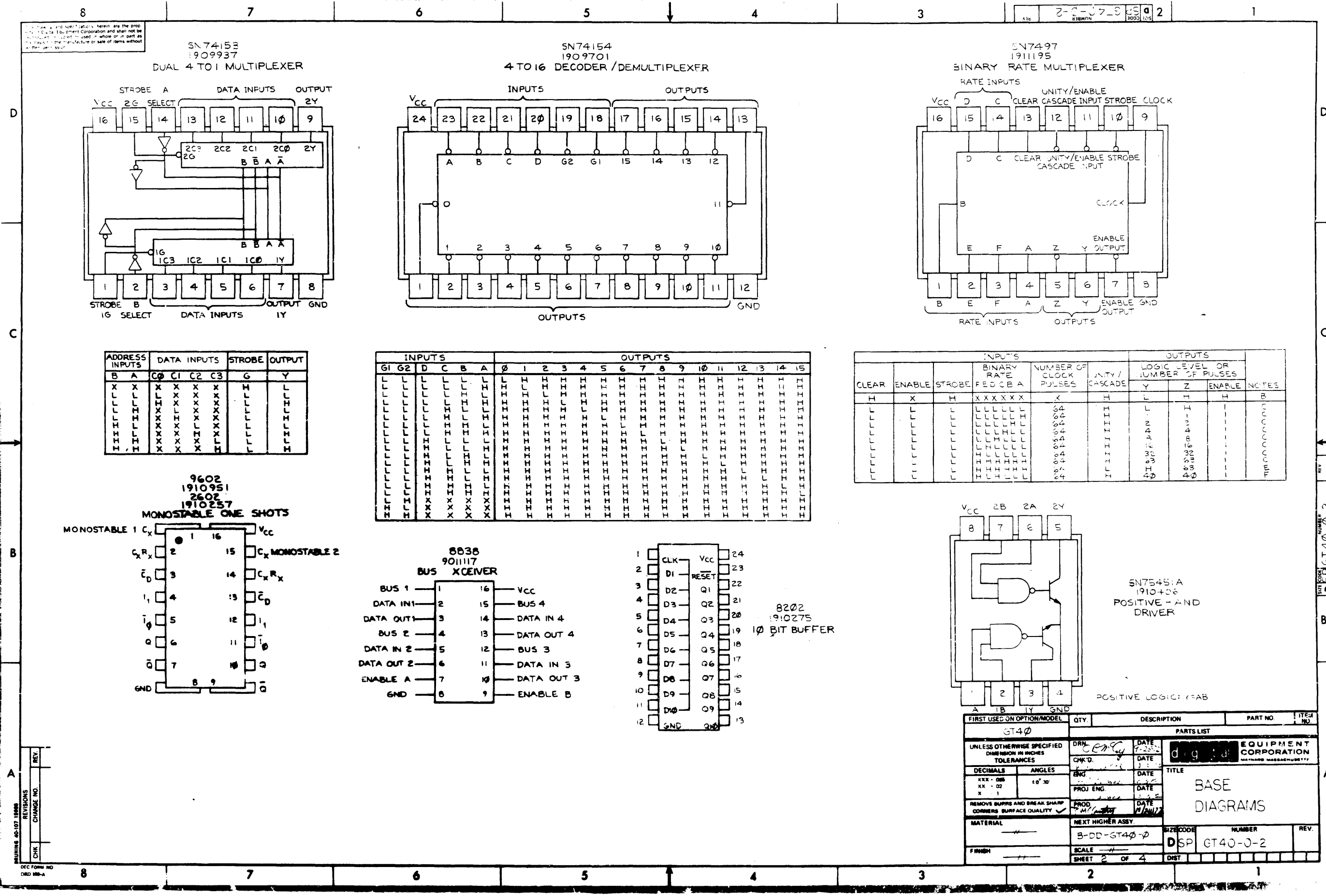
ASYNCHRONOUS INPUTS: LOW INPUTS TO LOAD SETS Q_A = A, Q_B = B, Q_C = C, AND Q_D = D

SN74193
1910098
4-BIT UP/DWN COUNTER

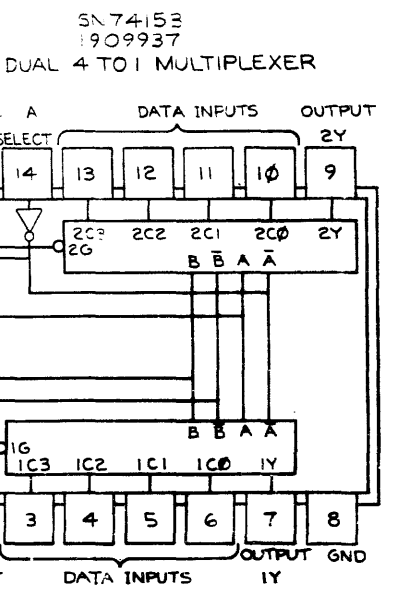


LOGIC: LOW INPUTS TO LOAD SETS Q_A = A, Q_B = B, Q_C = C AND Q_D = D

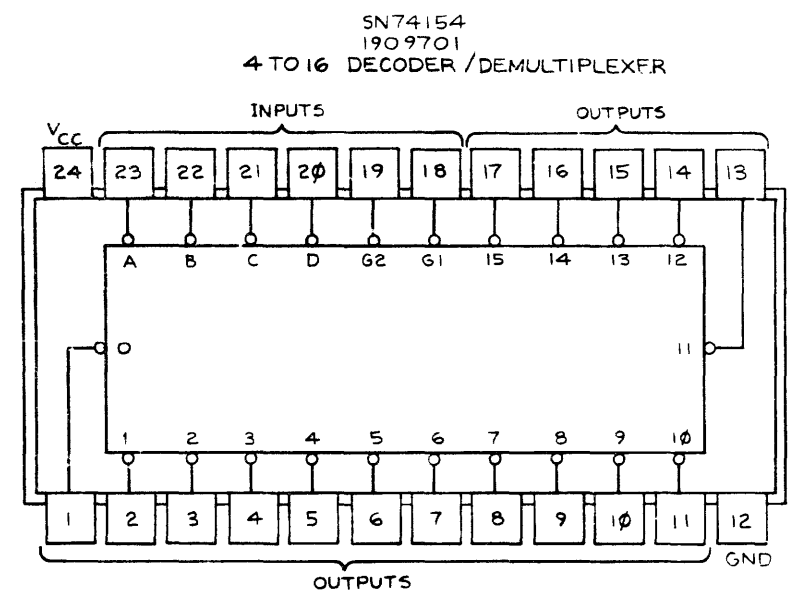
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	TITLE		
XXX - 000	±0°30'	BASE DIAGRAMS		
XX - 02		EQUIPMENT CORPORATION		
X - 1		PARTS LIST		
MATERIAL	NEXT HIGHER ASBY.	SCALE	NUMBER	REV.
FINISH		B-DD-GT40-2	DSP	GT40-0-2
SHEET OF 4		DSE GT40-0-2		



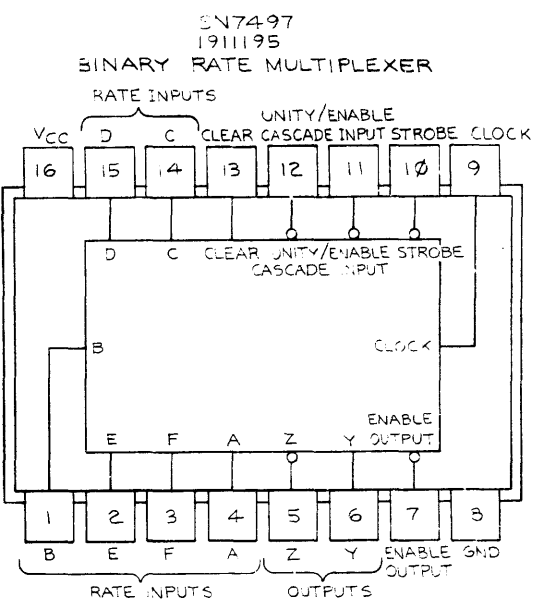
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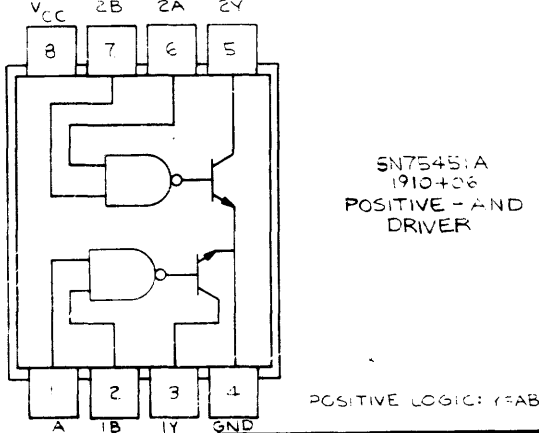
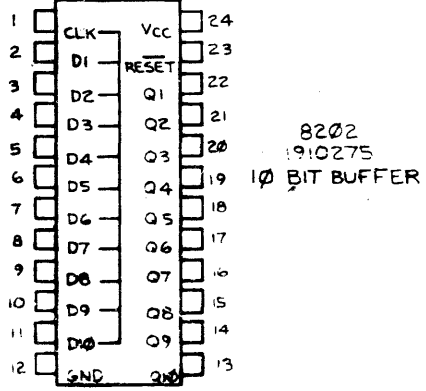
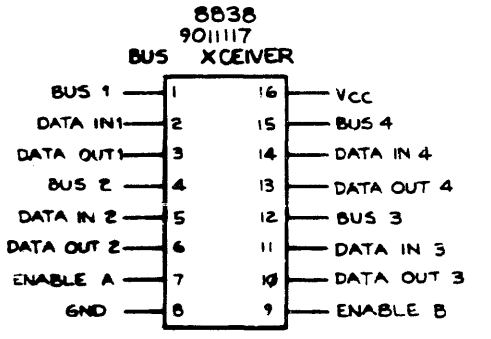
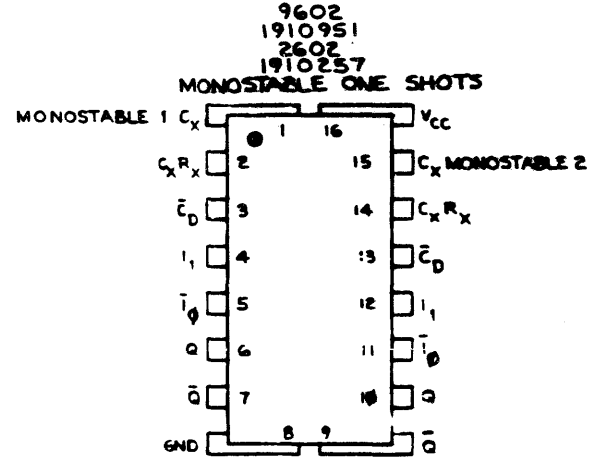
ADDRESS INPUTS	DATA INPUTS	STROBE	OUTPUT
B A	C ₀ C ₁ C ₂ C ₃	G	Y
X X	X X X X	X	X
L L	L L L L	L	L
L L	L L L L	X	L
L L	L L L L	X	L
L L	L L L L	X	L
L L	L L L L	X	L
L L	L L L L	X	L
L L	L L L L	X	L



INPUTS	OUTPUTS
G ₁ G ₂ D C B A	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L
L L L L	L L L L L L L L L L L L L L L L



CLEAR	ENABLE	STROBE	INPUTS BINARY RATE F E D C B A	NUMBER OF CLOCK PULSES	UNITY/ CASCADE	OUTPUTS LOGIC LEVEL OR NUMBER OF PULSES			NOTES
						Y	Z	ENABLE	
H	X	H	X X X X X X	X	H	L	L	H	B
L	L	L	L L L L L L	24	L	L	L	L	
L	L	L	L L L L L L	24	L	L	L	L	
L	L	L	L L L L L L	24	L	L	L	L	
L	L	L	L L L L L L	24	L	L	L	L	
L	L	L	L L L L L L	24	L	L	L	L	
L	L	L	L L L L L L	24	L	L	L	L	
L	L	L	L L L L L L	24	L	L	L	L	



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DRN 7-25	DATE		
TOLERANCES	CHK'D	DATE		
DECIMALS	ENG	DATE		
ANGLES	PROJ. ENG.	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY	PROD	DATE		
MATERIAL	NEXT HIGHER ASSY.	DATE		
FINISH	B-DD-GT40-0	DATE		
	SCALE	DATE		
	SHEET 2 OF 4	DATE		

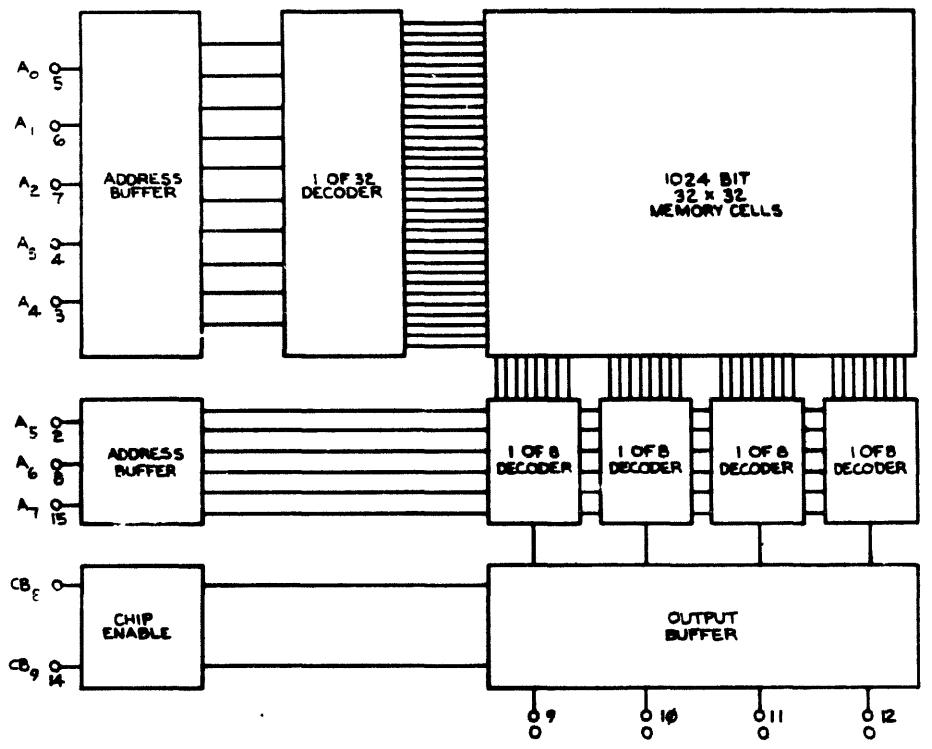
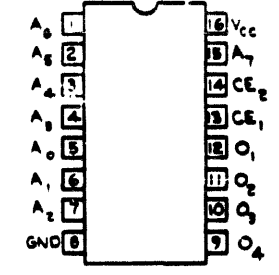
TITLE	NUMBER	REV.
BASE DIAGRAMS		

SIZE CODE	NUMBER	REV.
DSP	GT40-0-2	

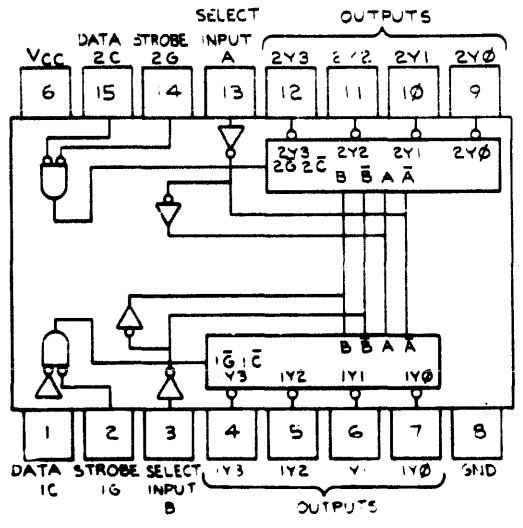
10-107 (REV. 10-68)
DEPT. OF DEFENSE
DND FORM NO. 10-107 (REV. 10-68)

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1M5603
23000A2-03
PROGRAMMABLE READ ONLY MEMORY

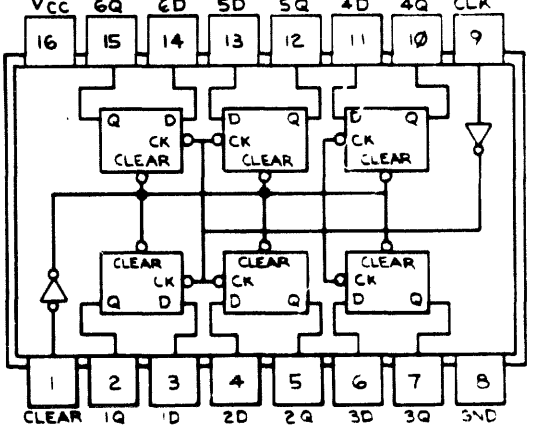


UN74155
1910656
2 TO 4 DECODER / DEMULTIPLEXER



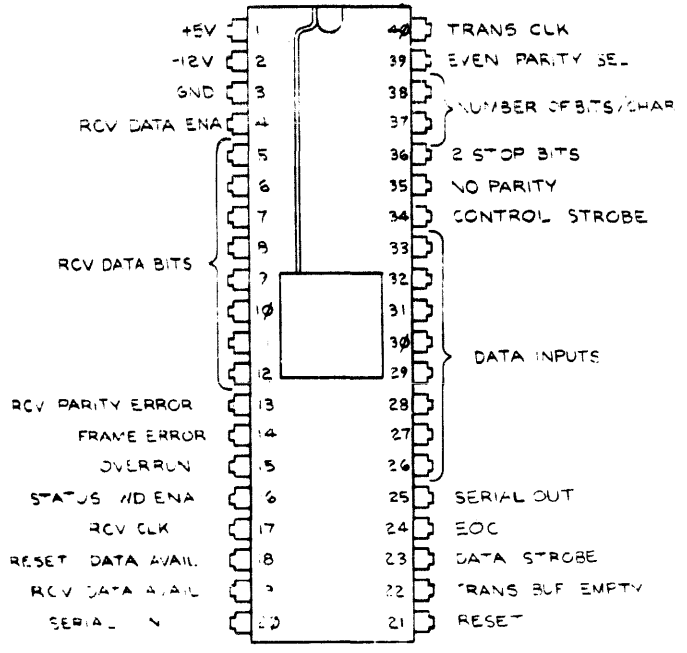
INPUTS			OUTPUTS				
SELECT	STROBE	DATA	1Y0	1Y1	1Y2	1Y3	
B	A	1G	1C	1Y0	1Y1	1Y2	1Y3
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X

SN74174
1910652
HEX D-TYPE FF'S

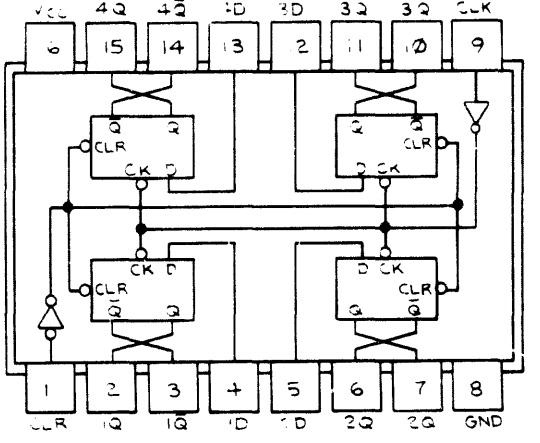


POSITIVE LOGIC: SEE FUNCTION TABLE

UART
191C459
UNIVERSAL ASYNC. RECEIVER TRANSMITTER



SN74175
1910651
QUAD D-TYPE FF'S



POSITIVE LOGIC: SEE FUNCTION TABLE

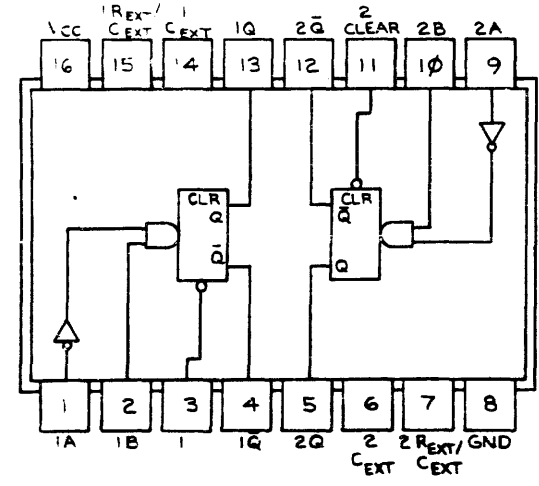
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES TOLERANCES	DATE 9-25-72	DATE	EQUIPMENT CORPORATION	
DECIMALS ANGLES	DATE	DATE	TITLE	
XXX - 00 10' 30"	DATE	DATE	BASE DIAGRAMS	
NEUTRE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE	DATE	MATERIAL	
	DATE	DATE	NEXT HIGHER ASSY.	
	DATE	DATE	SCALE	
	DATE	DATE	FINISH	
	DATE	DATE	PART 3 OF 4	
	DATE	DATE	DST	

REV. 1
CHANGE NO.
DATE

REV. 1
NUMBER
D SP GT40-0-2

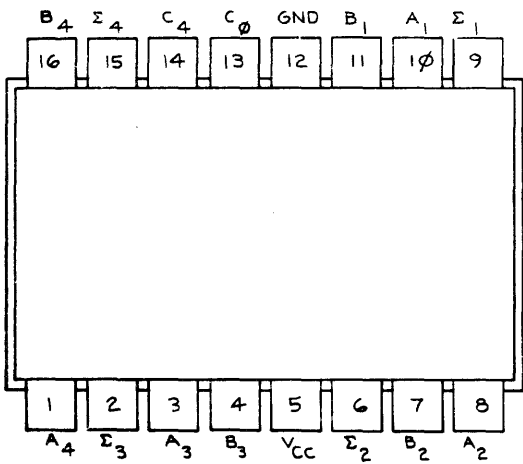
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**SN74123
1910436
RETRIGGERABLE MONOSTABLE MULTIVIBRATOR**



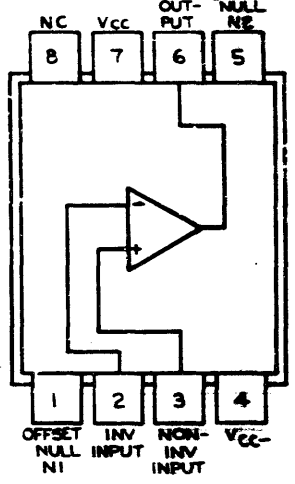
POSITIVE LOGIC
LOW INPUT TO CLEAR RESETS Q TO LOW LEVEL AND INHIBITS DATA INPUTS.

**SN7483
1909932
4-BIT BINARY FULL ADDER**

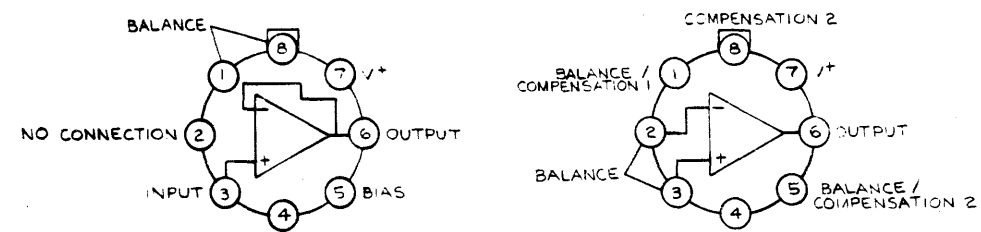
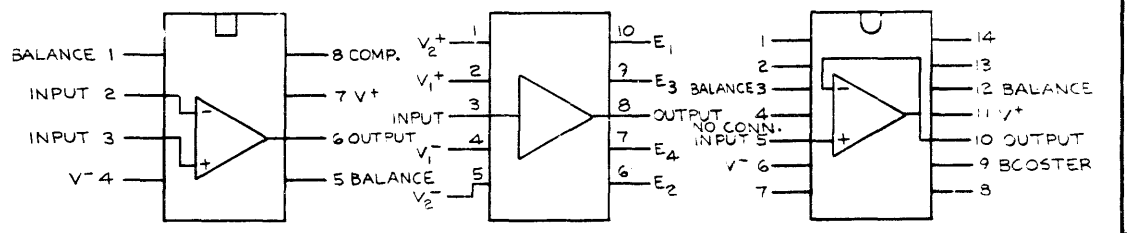


INPUT	OUTPUT							
	WHEN C ₀ =0				WHEN C ₀ =1			
A ₄	B ₄	A ₃	B ₃	A ₂	B ₂	A ₁	B ₁	C ₄
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0
0	0	0	0	0	1	0	0	0
0	0	0	0	0	1	0	1	0
0	0	0	0	1	0	0	0	0
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1	1	1	1	1	0	0	0	1
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**DEC741C
1910298**



**DEC 301AN
1910282** **NH0002CN
1910446** **LM310
1910235**



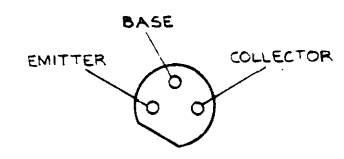
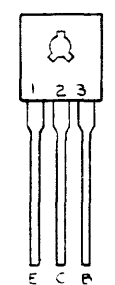
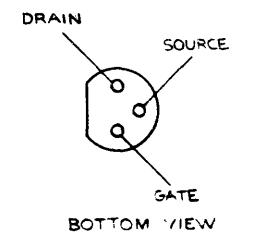
NOTE: PIN 4 CONNECTED TO CASE.
LV302
1909343

LM318
1910735

2N5245
1509681

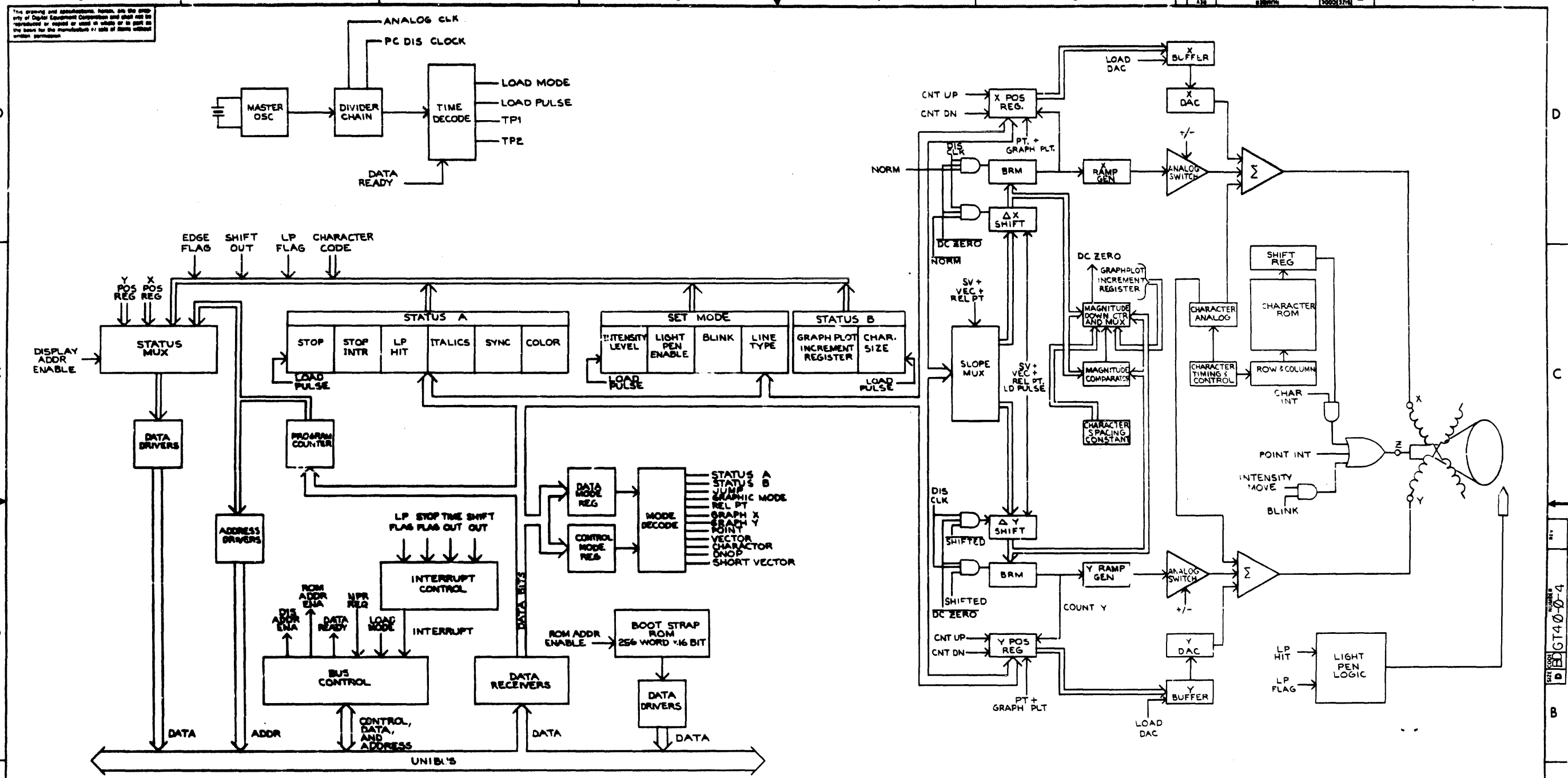
MJE 2955
1510556
MJE 3055
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2N4250
1509142
DECC534B
1503409-01



REV. 1	DATE
REV. 2	DATE
REV. 3	DATE
REV. 4	DATE
REV. 5	DATE
REV. 6	DATE
REV. 7	DATE
REV. 8	DATE
REV. 9	DATE
REV. 10	DATE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITER.
GT40				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE	EQUIPMENT CORPORATION	
XXX - 000	±0° 30'	DATE	BASE DIAGRAMS	
XX - 00		DATE	GT40-0-2	
X - 1		DATE	REV. 1	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL				
FINISH				
SCALE				
SHEET 4 OF 4				

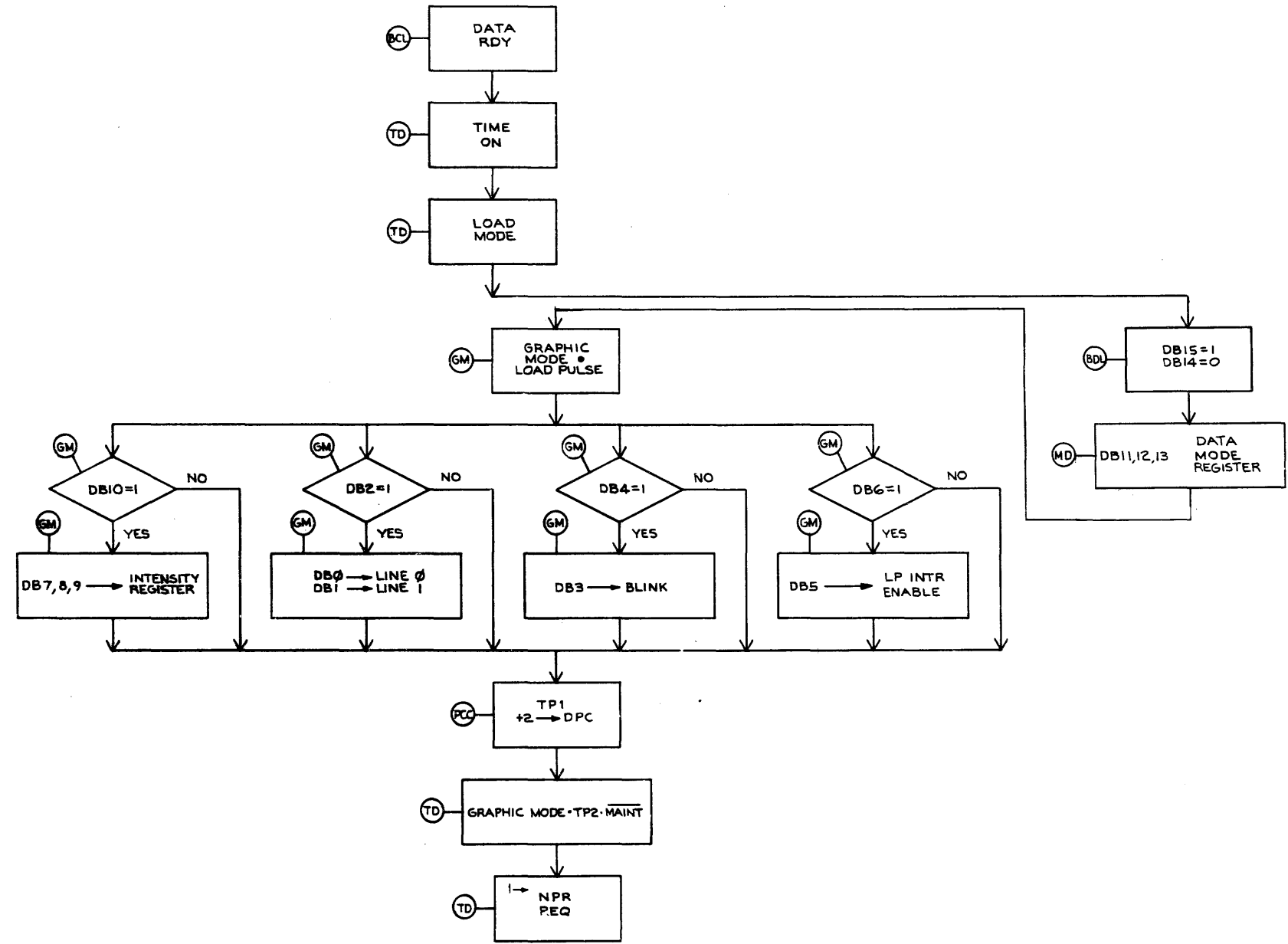


REV	
CHANGE NO.	
DATE	
BY	
CHKD	
DATE	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN. <i>COMG</i>	DATE 7-29-72	 digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS	CHKD. <i>Call</i>	DATE 10-2-72		
ANGLES	ENG. <i>Call</i>	DATE 10/2/72		
XXX - 008 XX - 02 X - 1	PROJ. ENG. <i>Call</i>	DATE 10/2/72		
REMOVES BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD. <i>Call</i>	DATE 10/2/72	TITLE DISPLAY PROCESSOR	
MATERIAL	NEXT HIGHER ASSEMBLY		SIZE CODE	NUMBER
FINISH	B-DD-GT40-0		D BD	GT40-0-4
	SCALE			REV
	SHEET 1 OF 1			

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REV A GT40-0-5 2

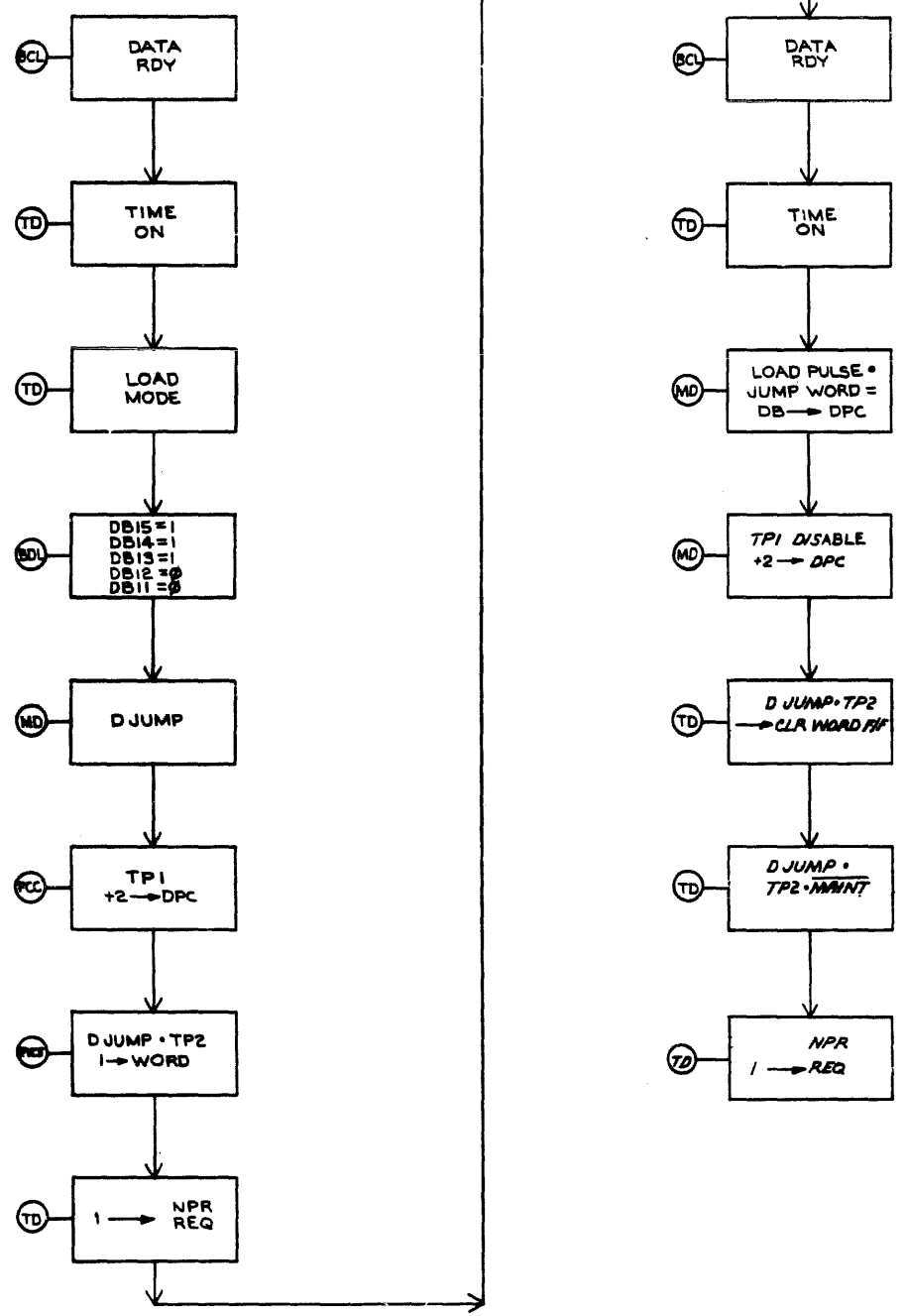


REV	CHG	NO	DATE	BY
A	1	140	00013	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES:	DRN. <i>CBM</i>	DATE 10-2-72	 digital EQUIPMENT CORPORATION <small>MAYNARD MASSACHUSETTS</small>	
TOLERANCES	CHK'D. <i>K. O'Neil</i>	DATE 10-5-72		
DECIMALS ANGLES	ENG. <i>H. E. Lewis</i>	DATE 10/1/72		
.XXX - .005 .XX - .02 .X - .1	PROJ. ENG. <i>H. E. Lewis</i>	DATE 10/1/72		
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY	PRGR. <i>H. E. Lewis</i>	DATE 10/1/72	SET GRAPHIC MODE	
MATERIAL	NEXT HIGHER ASSY.			
FINISH	B-DD-GT40-0	SIZE CODE		
	SCALE	NUMBER		
	SHEET	DIST	REV. A	

REV A GT40-0-5

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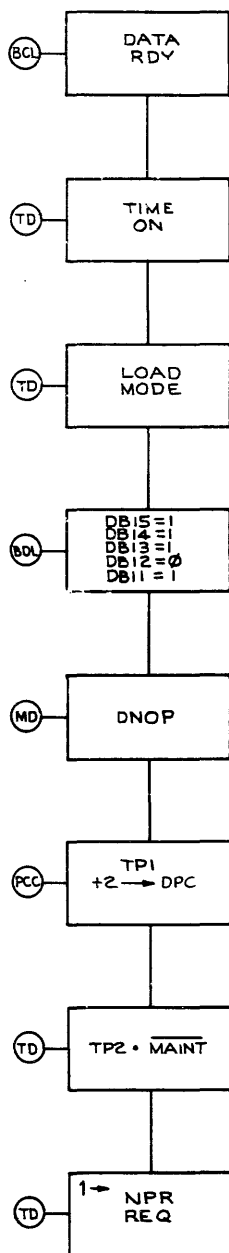


REV	CHANGE NO	DATE
A	0003	10/1/72
LAWDIE		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
.XXX - .006	±0° 30'	DRN	DATE	 digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
.XX - .02		CHK'D	DATE	
.X - .1		ENG	DATE	
		PROJ. ENG.	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD.	DATE	TITLE
				DISPLAY JUMP
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE		
	B-DD-GT40-0	NUMBER		
FINISH	SCALE	REV.		
		D FD GT40-0-6 A		
SHEET 1 OF 1		DIST.		

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GT40-0-7 2

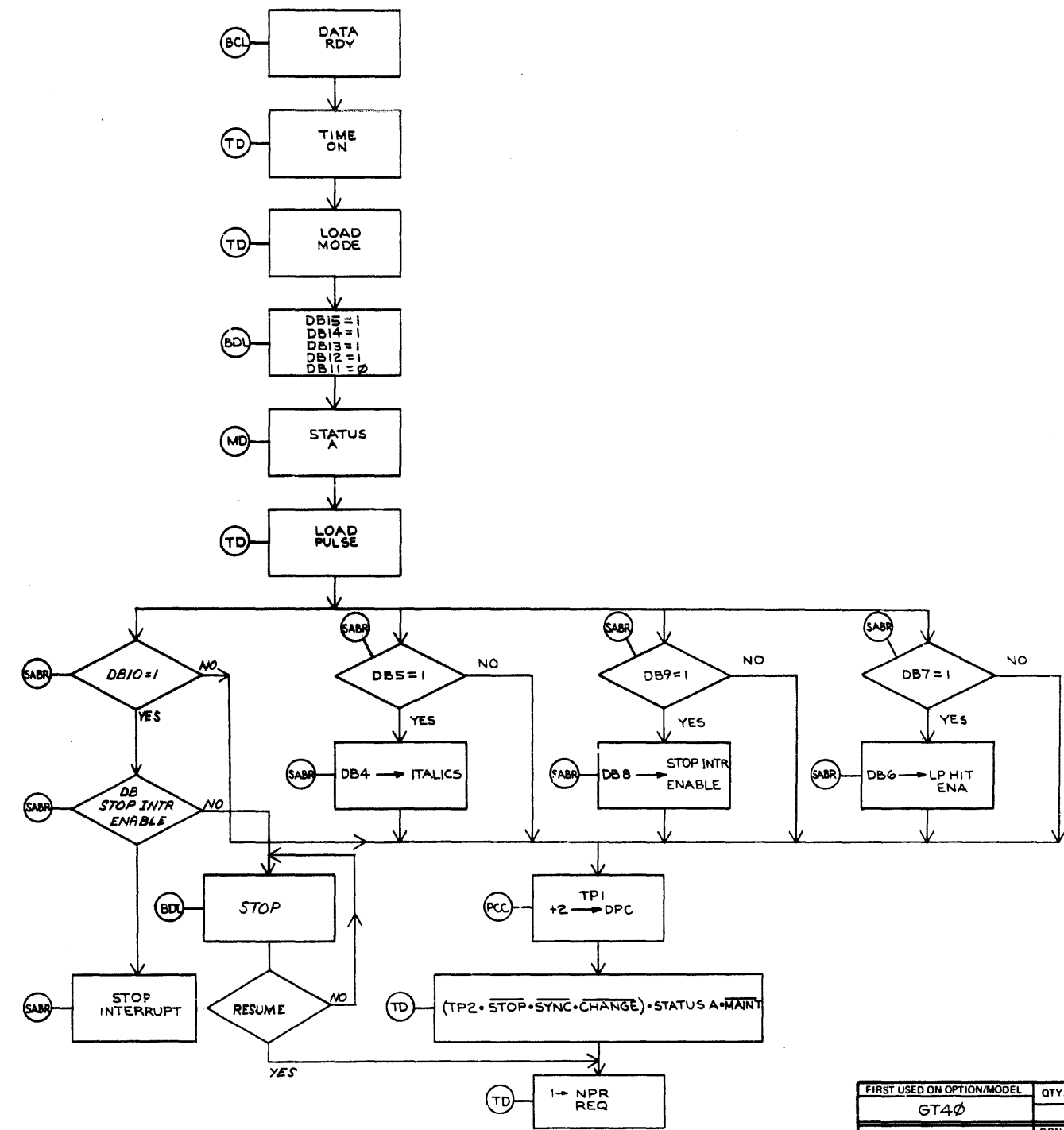


REV	
CHG	
CHK	
REVISIONS	
CHANGE NO	

FIRST USED ON OPTION/MODEL GT40	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN CBH/Cy 10-2-72	DATE	digital EQUIPMENT CORPORATION MAYFORD, MASSACHUSETTS	
DECIMALS .005	CHK'T R. G. Kelly 10-5-72	DATE	TITLE NO OPERATION	
ANGLES ±0° 30'	ENG. H. E. Payne 10/1/72	DATE		
.XX - .02	PROJ. ENG. H. E. Payne 10/1/72	DATE		
.X - .1	PROD. R. O. Kennell 10/1/72	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓				
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV.
---	B-DD-GT40-0	DFD	GT40-0-7	
FINISH	SCALE	DIST.		
---	---	SHEET 1 OF 1		

REV. NO. GT40-0-7

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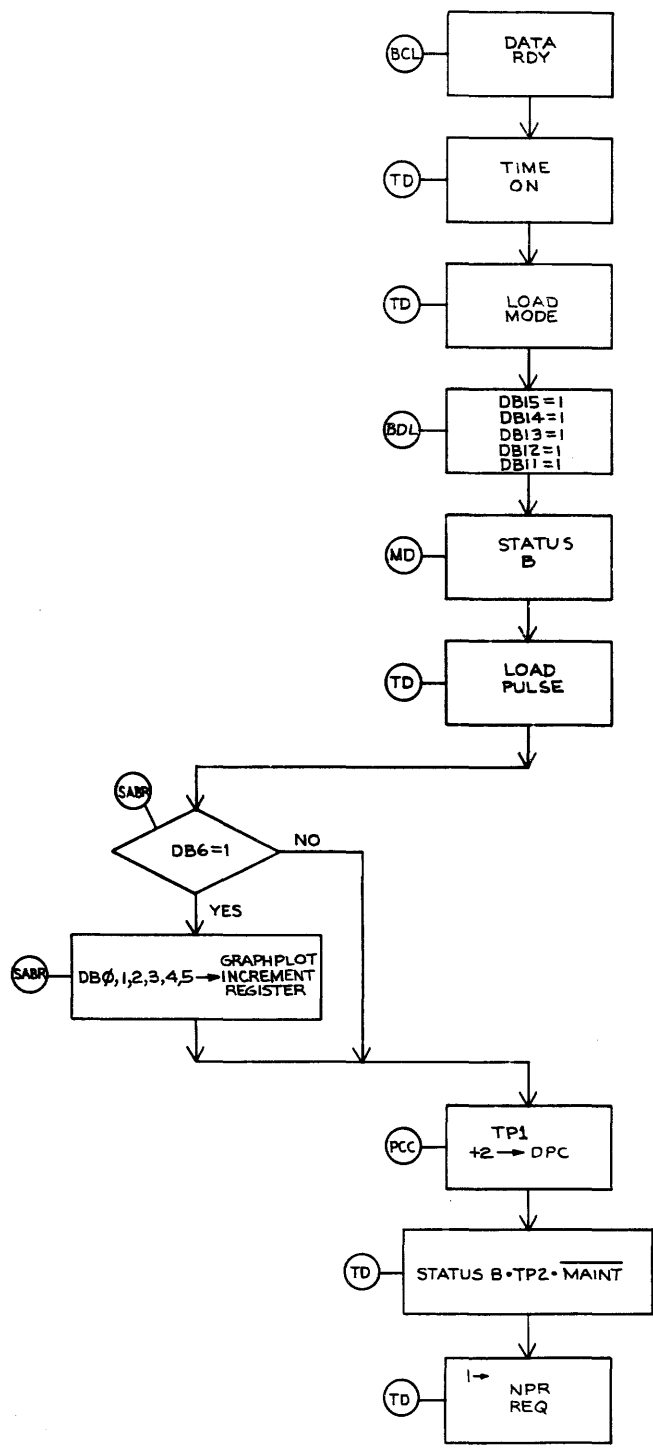


REV	A
CHANGE NO	00017
CHK	LAVOIE
DATE	11/2/72

FIRST USED ON OPTION/MODEL	GT40	QTY.		DESCRIPTION		PART NO.		ITEM NO.	
PARTS LIST									
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES.	DRN	CBAC	DATE	10-2-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS				
TOLERANCES	APP'D.		DATE		TITLE				
DECIMALS	XXX = .005	ANGLES	±0° 30'	LOAD STATUS REGISTER A					
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROJ. ENG.		DATE		MATERIAL				
	PROD.		DATE		NEXT HIGHER ASSY.				
					B-DD-GT40-0		SIZE CODE	NUMBER	REV.
					D		FD	GT40-0-8	A
					SCALE				
					SHEET		OF		

REV. A
D FD GT40-0-8

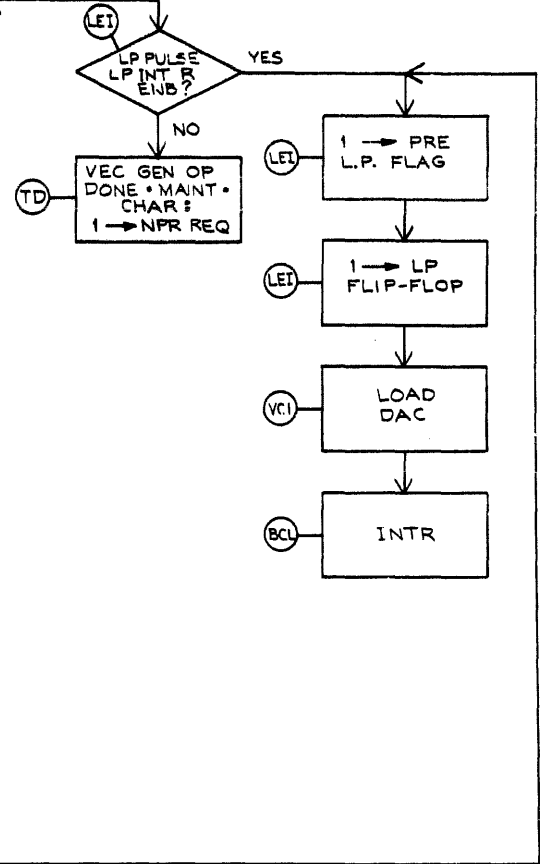
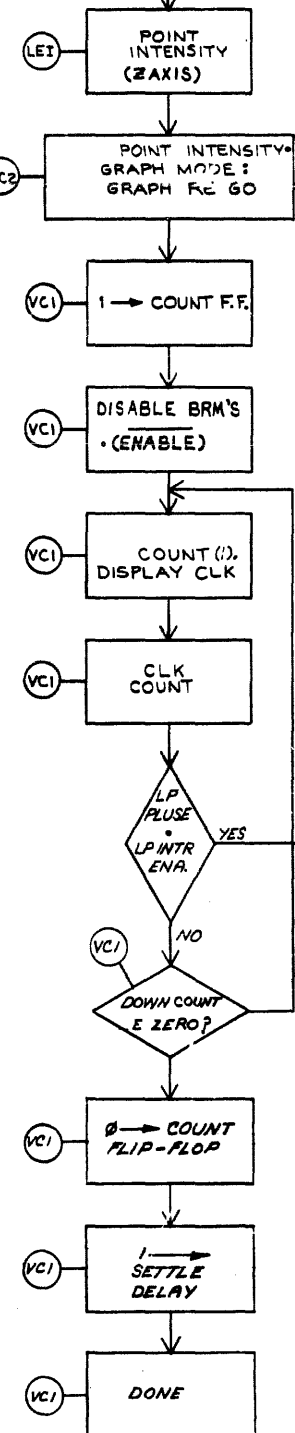
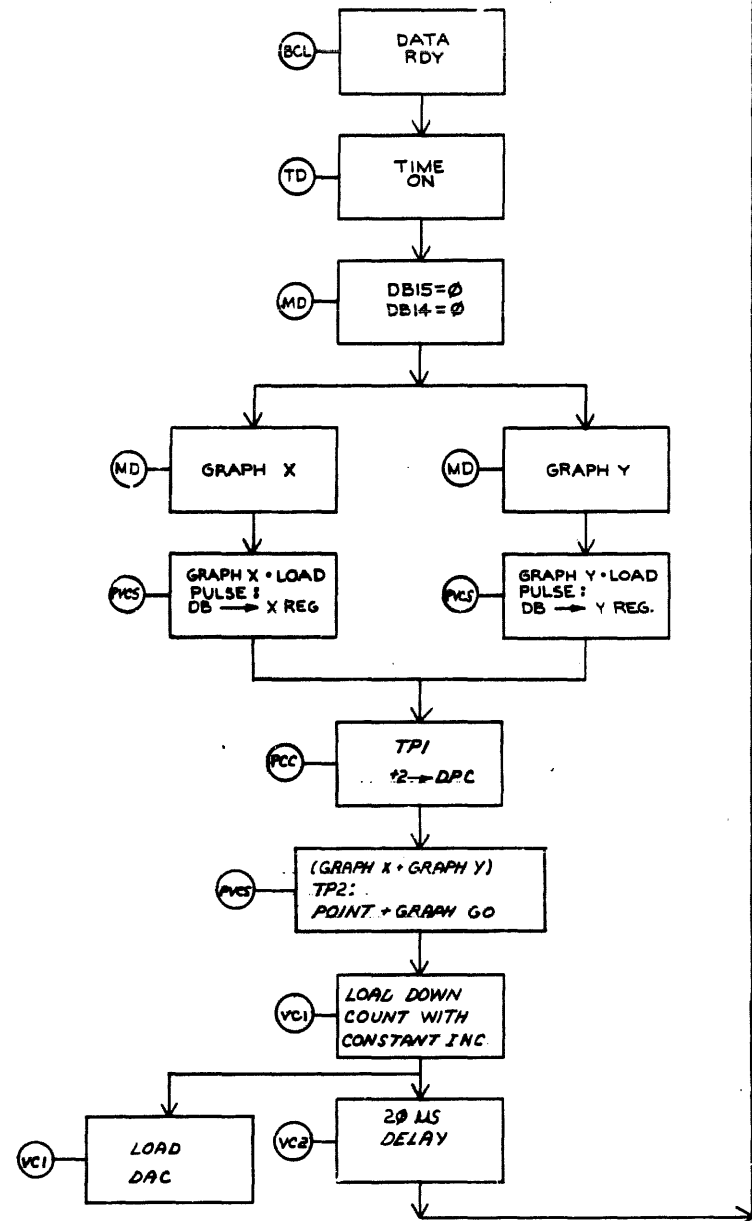
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BRUNING 40 522 18840	REVISIONS
CHK	CHANGE IN
2H	GT40-00013
	LAVOIE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES.	DRN. CB Mc Coy	DATE 10-3-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
TOLERANCES	CHK'D. W. J. C. C. C.	DATE 2-5-72	TITLE	
DECIMALS	ENG. H. J. L. L. L.	DATE 10/27/72	LOAD STATUS REGISTER B	
XXX = .005	PROJ. ENG. H. J. L. L. L.	DATE 10/27/72		
XX = .02	PROD. H. J. L. L. L.	DATE 10/27/72		
X = .1				
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD. H. J. L. L. L.	DATE 10/27/72		
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
---	B-DD-GT40-0		DFD	GT40-0-9
FINISH	SCALE		DIST.	REV.
---	---			A
	SHEET 1 OF 1			

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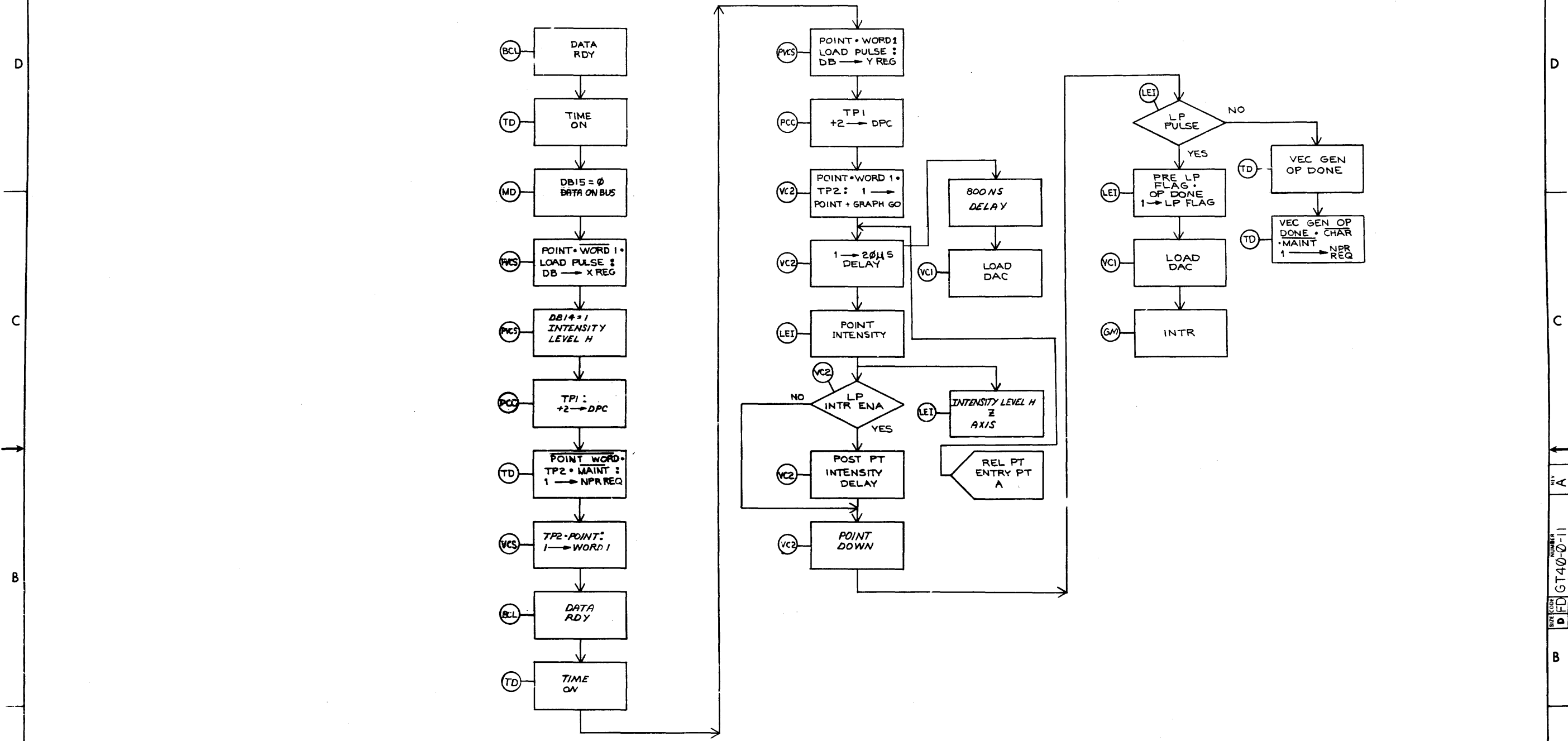


BRUNING 40-221 15840	REV. NO.	REV.
CHANGE NO.	CHG	A
GT40-00001	CHK	
LAVOIE	DES	

FIRST USED ON OPTION/MODEL GT40	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DRN CBM/CJ	DATE 10-3-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
TOLERANCES	CHK'D R. J. Lavoie	DATE 10-3-72	TITLE GRAPH X OR GRAPH Y	
DECIMALS .XXX = .006	ENG. R. J. Lavoie	DATE 10-3-72	SIZE CODE D	
ANGLES .XX = .02	PROJ. ENG. R. J. Lavoie	DATE 10-3-72	NUMBER GT40-0-10	
.X = .1	PROD. R. J. Lavoie	DATE 10-3-72	REV. A	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY. B-DD-GT40-0			
MATERIAL	SCALE		DIST.	
FINISH	SHEET OF			

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SIZE CODE DFD GT40-0-11 2



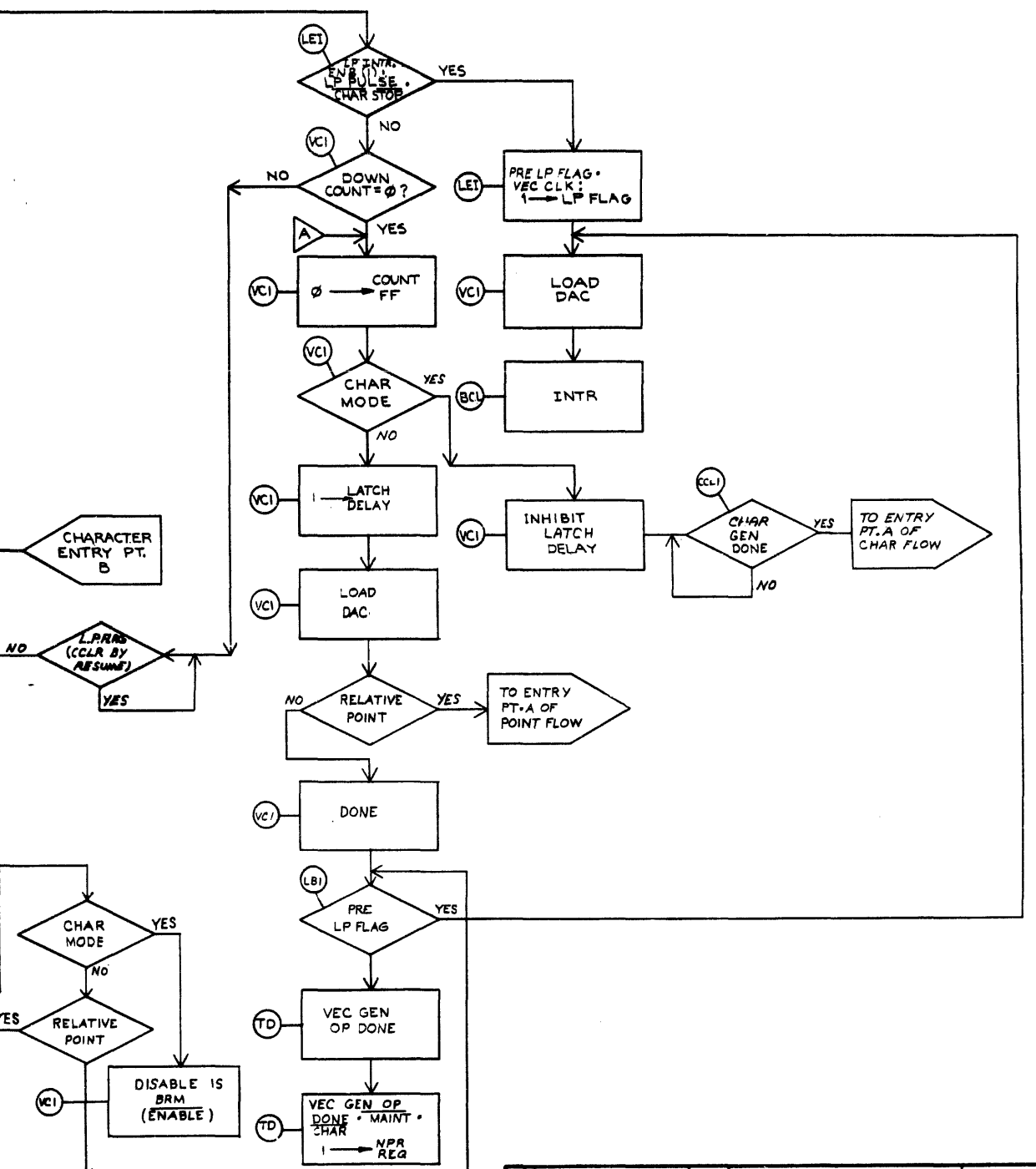
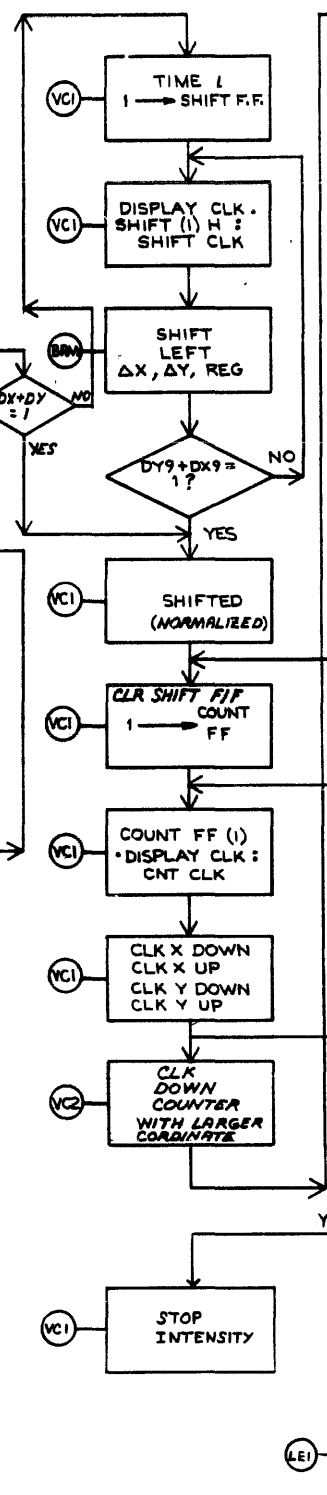
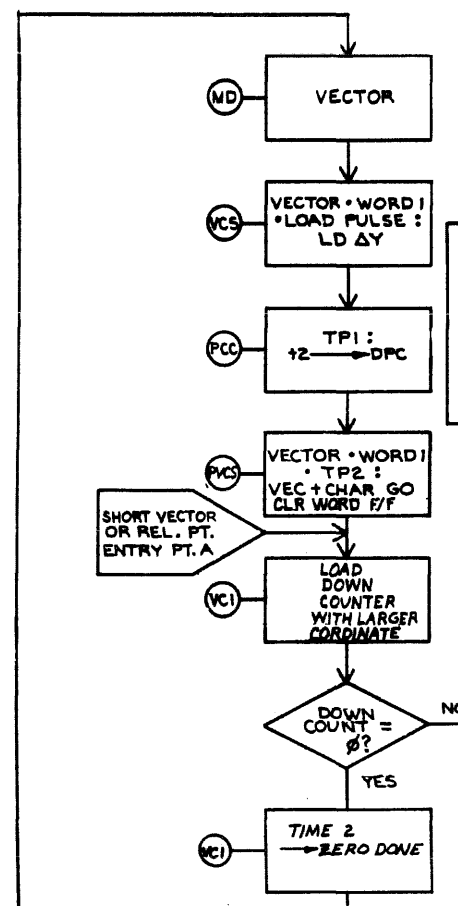
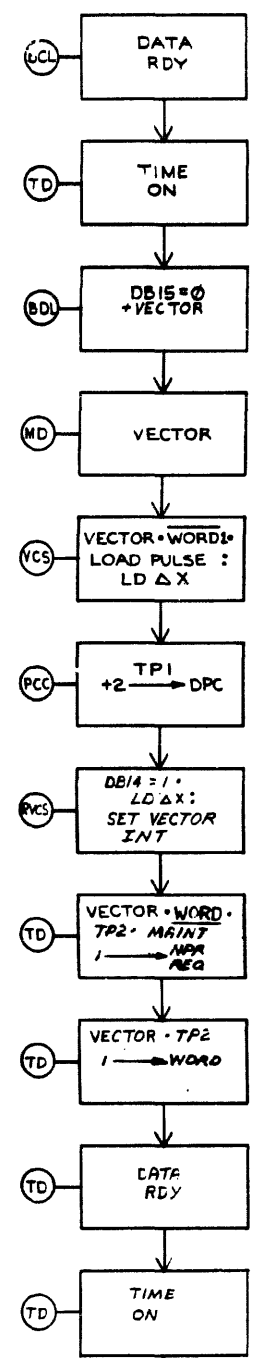
REVISIONS

CHK	CHANGE NO	REV
...	...	A
...	...	B
...	...	C
...	...	D

LA VOIE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN: C. M. G.	DATE: 10-4-72	 digital EQUIPMENT CORPORATION <small>MATTAPOISETT, MASSACHUSETTS</small>	
DECIMALS .XXX - .005	CHKD: M. J. G.	DATE: 10-11-72		
ANGLES ±0° 30'	ENG: H. S. L.	DATE: 10/17/72		
.XX - .02	PROJ. ENG: H. S. L.	DATE: 10/17/72		
.X - .1	PROD: P. M. G.	DATE: 10/17/72	TITLE POINT MODE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓				
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH	B-DD-GT40-0		DFD	GT40-0-11
SCALE	SHEET 1 OF 1		DIST.	

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BRUNING 40-522 15840

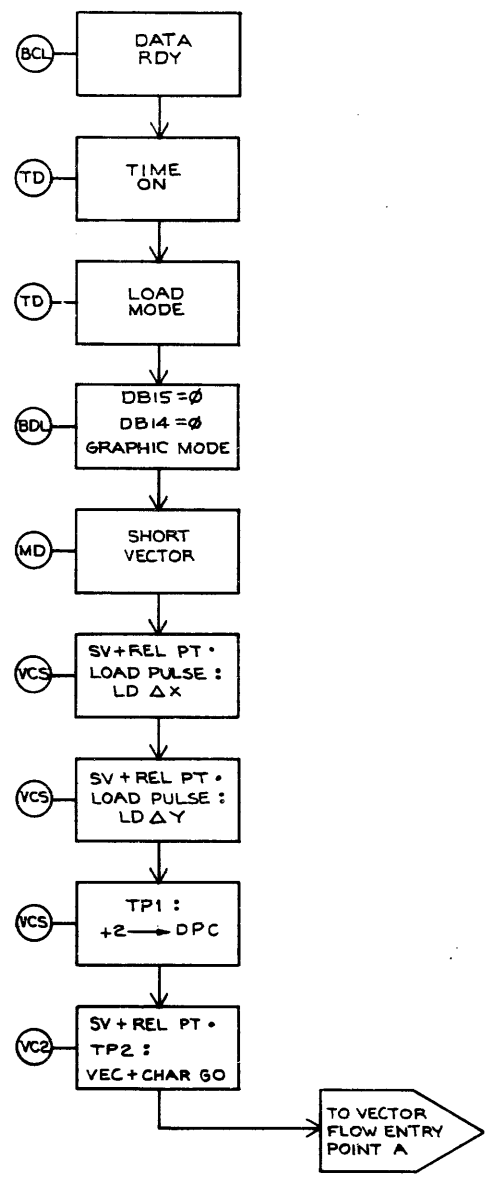
REV	CHANGE NO	DATE
A	1140-00013	
B		
C		
D		

LAVOIE
Fowler-Lavie 11/2/72

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO
GT40		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>CSM</i>	DATE 10-12-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
DECIMALS	ANGLES	CHKD <i>CSM</i>	DATE 10-27-72	
.XXX - .008 .XX - .02 .X - .1	± 0° 30'	ENG <i>CSM</i>	DATE 10-27-72	TITLE VECTOR MODE
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROJ. ENG. <i>CSM</i>	DATE 10-27-72	
MATERIAL	NEXT HIGHER ASSY.	PROD. <i>CSM</i>	DATE 10-27-72	
FINISH	B-DD-GT40-0	SCALE		SIZE CODE NUMBER REV.
		SHEET 1 OF 1		D FD GT40-0-12 A

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SIZE CODE NUMBER GT40-0-13 2



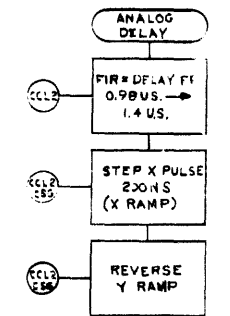
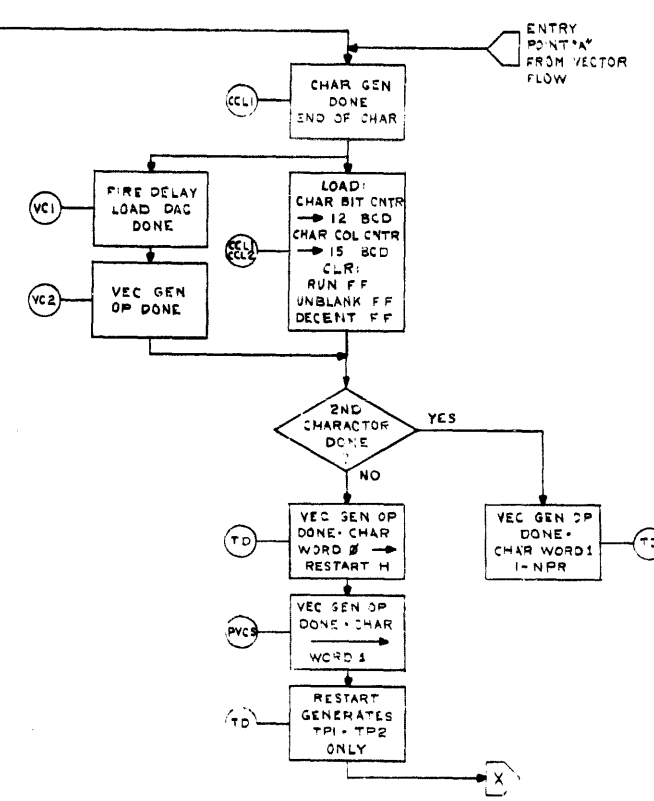
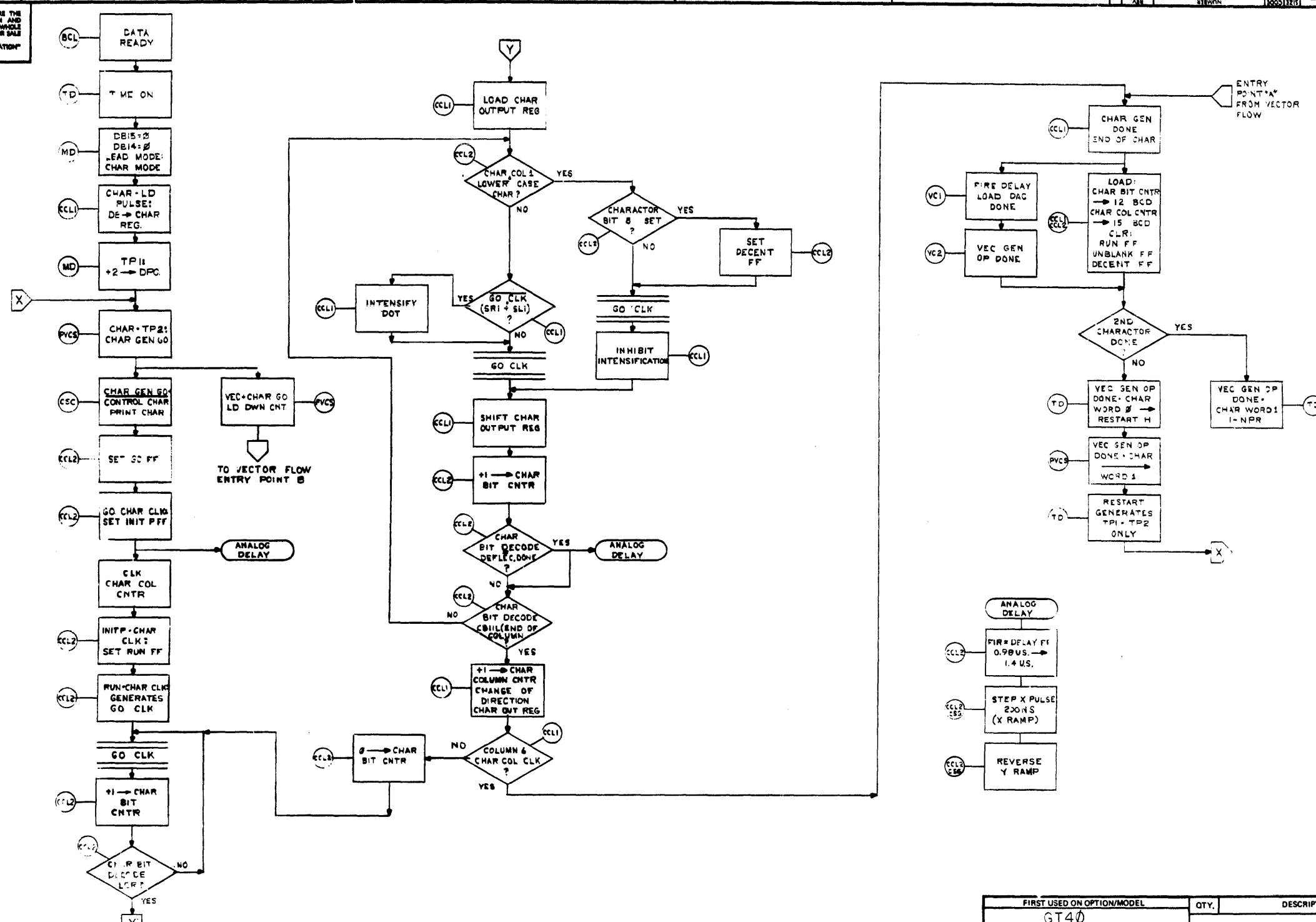
REV	CHANGE NO

SIZE CODE NUMBER GT40-0-13

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN <i>CBM</i>	DATE 10-5-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	CHK'D <i>W. C. Kelly</i>	DATE 11-11-72	TITLE SHORT VECTOR OR RELATIVE POINT	
ANGLES	ENG <i>W. C. Kelly</i>	DATE 11-17-72		
.XXX - .006	PROJ. ENG. <i>W. C. Kelly</i>	DATE 10-17-72		
.XX - .02	PROP. <i>W. C. Kelly</i>	DATE 10-19-72		
.X - .1	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH			D FD	GT40-0-13
	SCALE		DIST.	
	SHEET 1 OF 1			

DEC FORM NO
ORD 380-2

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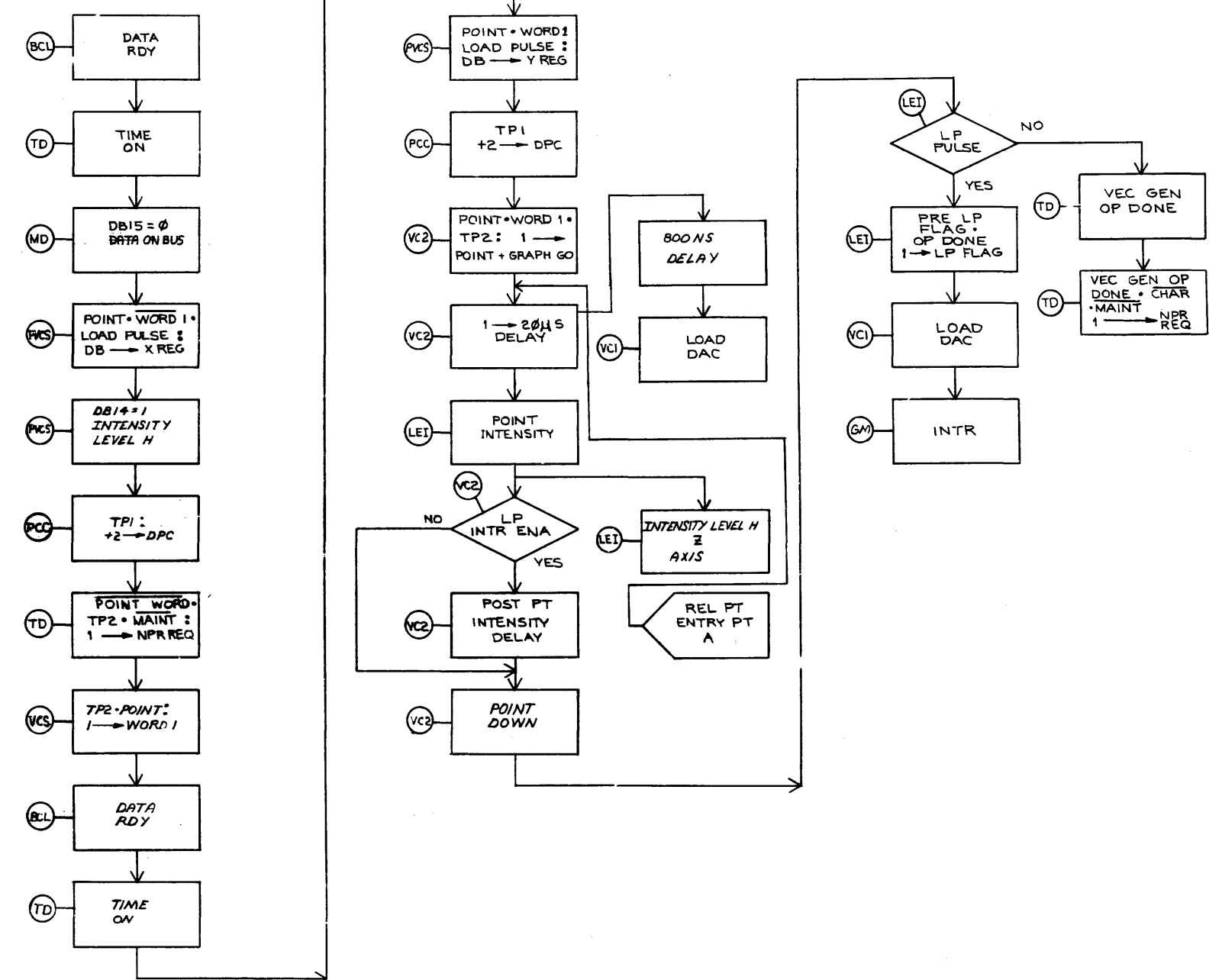


REV.	CHG. NO.	REV.
1	GT40-00015	R
2	REVISED REDRAWING	
3	H. LAVOIE	
4	H. LAVOIE	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
PARTS LIST				
DIMENSIONAL TOLERANCE		DRN. C.B. McCOY	DATE 0-5-72	digital
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED		CHK'D. J.K. CRA-HE	DATE 0-11-72	
MILLIMETERS	INCHES	ANGLES	DATE 10-13-72	TITLE CHARACTOR GENERATOR
XJX ±0.10	JXX ±.006	±0° 30'	PROJ. ENG. H.E. LAVOIE	
XX ±0.5	JX ±.02		DATE 10-3-72	
X ±2	X ±.1		PROD. R.B. O'DONNELL	DATE 10-19-72
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	NEXT HIGHER ASSY.		
MATERIAL		B-DD-GT40-φ	SIZE CODE	NUMBER
FINISH			D FD	GT40-φ-14
			SCALE	REV. B
			SHEET OF	DIST.

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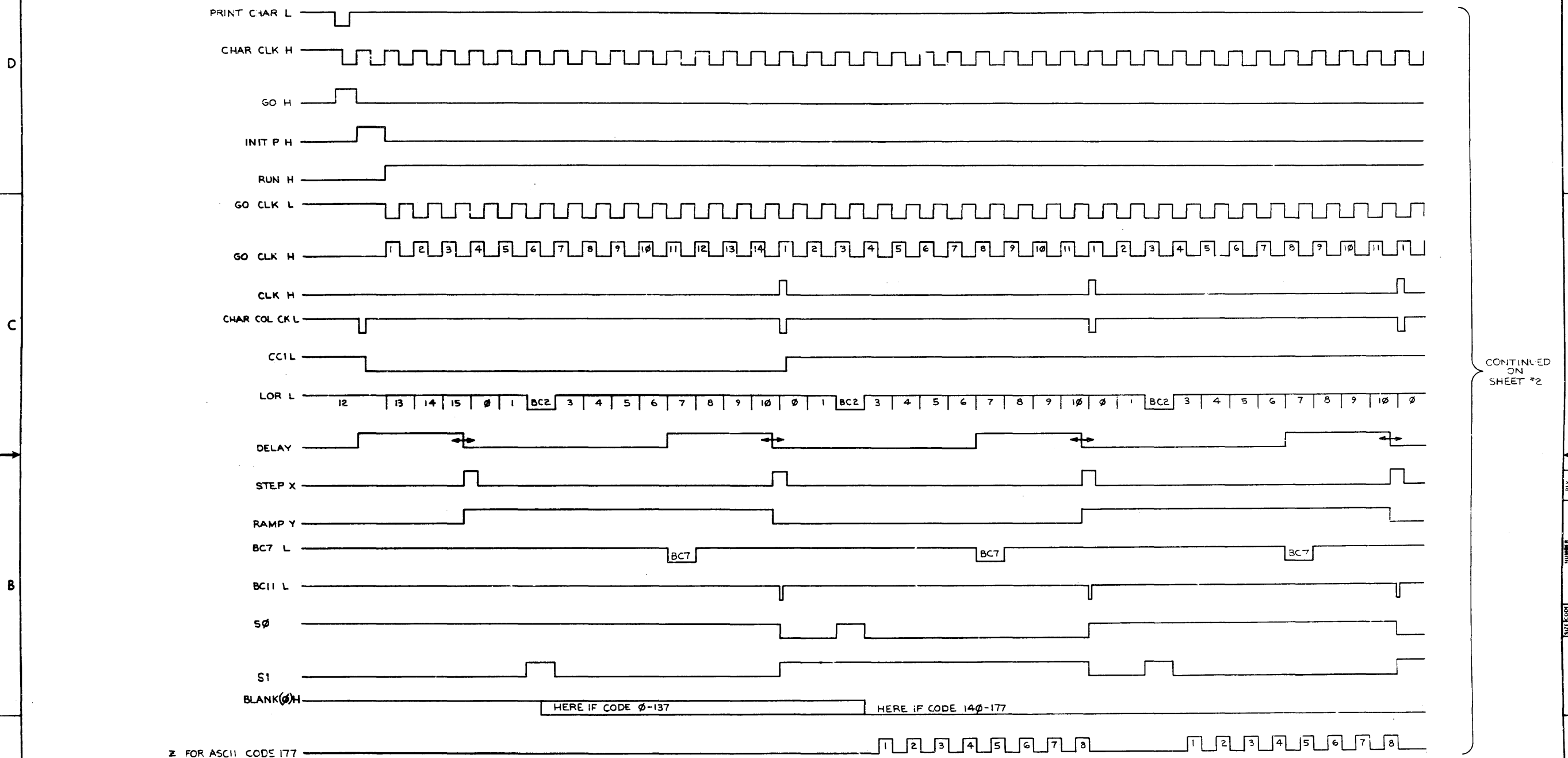
SIZE CODE D FD GT40-0-11 2



REV	CHANGE NO	DATE	BY
1	1	10-11-72	W. J. Lavoie
2	2	10-11-72	W. J. Lavoie
3	3	10-11-72	W. J. Lavoie
4	4	10-11-72	W. J. Lavoie

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES.				
DECIMALS	ANGLES	PARTS LIST		
.XXX = .006	±0° 30'	DRN: C. B. Mc Coy	DATE: 10-4-72	digital EQUIPMENT CORPORATION MATTAPOISETT, MASSACHUSETTS TITLE: POINT MODE
.XX = .02		CHK'D: W. J. Lavoie	DATE: 10-11-72	
.X = .1		ENG: H. S. Lavoie	DATE: 10-11-72	
		PROJ. ENG: H. S. Lavoie	DATE: 10-11-72	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH	B-DD-GT40-0		DFD	GT40-0-11
	SCALE			REV. A
	SHEET	OF 1	DIST.	

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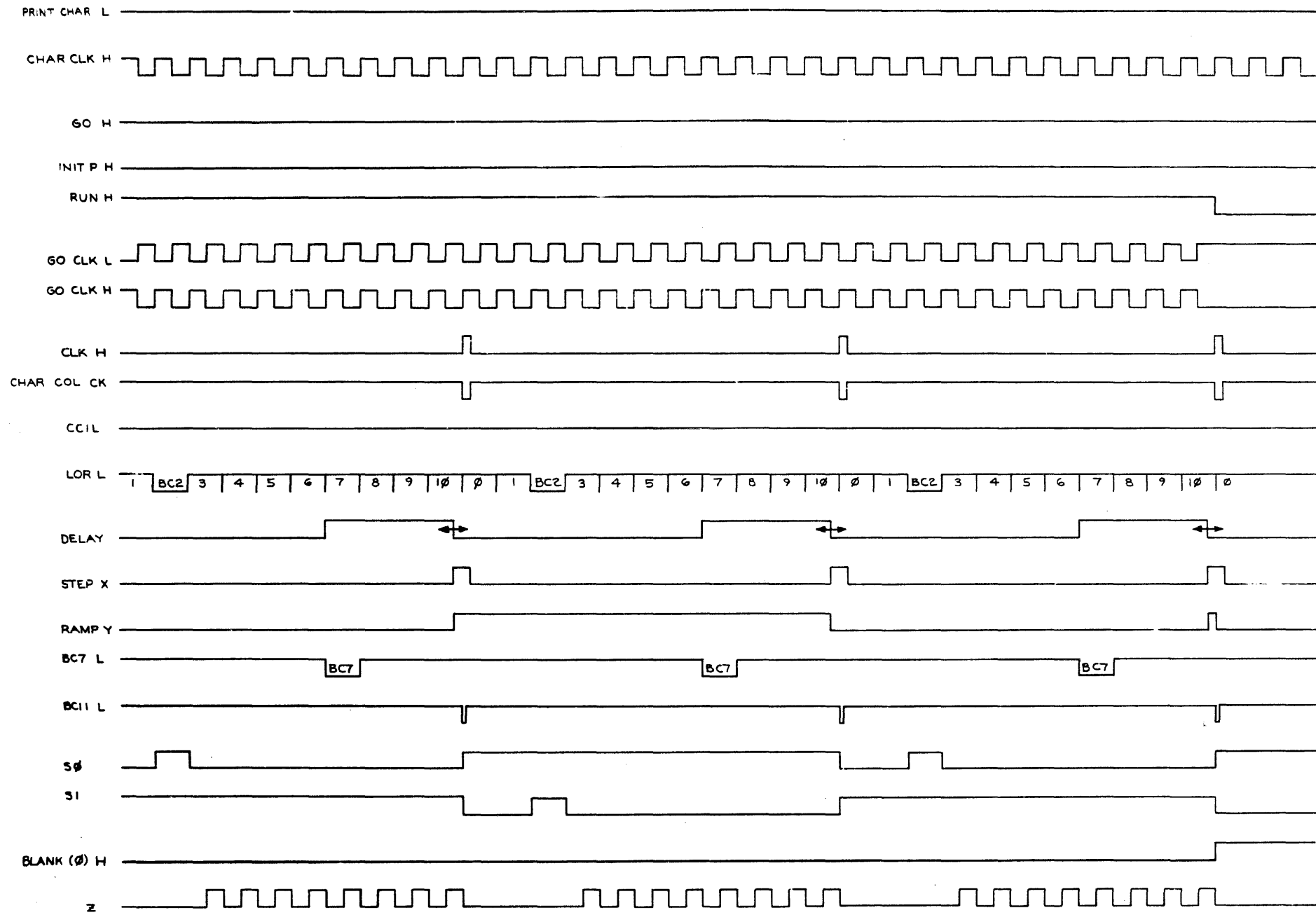
CONTINUED ON SHEET 2

REV	
CHANGE NO	
CHK	

SEC / FORM NO JRD 102-B

FIRST USED ON OPTION/MODEL GT40	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DRN COMG	DATE 10-9-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	CHD D. G. Calk	DATE 11-13-72	TITLE CHARACTER GENERATOR LOGIC TIMING	
ANGLES	PROJ. ENG. 1/5 of base	DATE 1/2/73	SIZE CODE B-DD-GT40-0	
XXX - .005	PROD. 1/20 of small	DATE 1/13/73	NUMBER D TD GT40-0-16	
.XX - .02			REV.	
.X - .1			SHEET 1 OF 3	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			DIST.	
MATERIAL	NEXT HIGHER ASSY.			
FINISH	SCALE			

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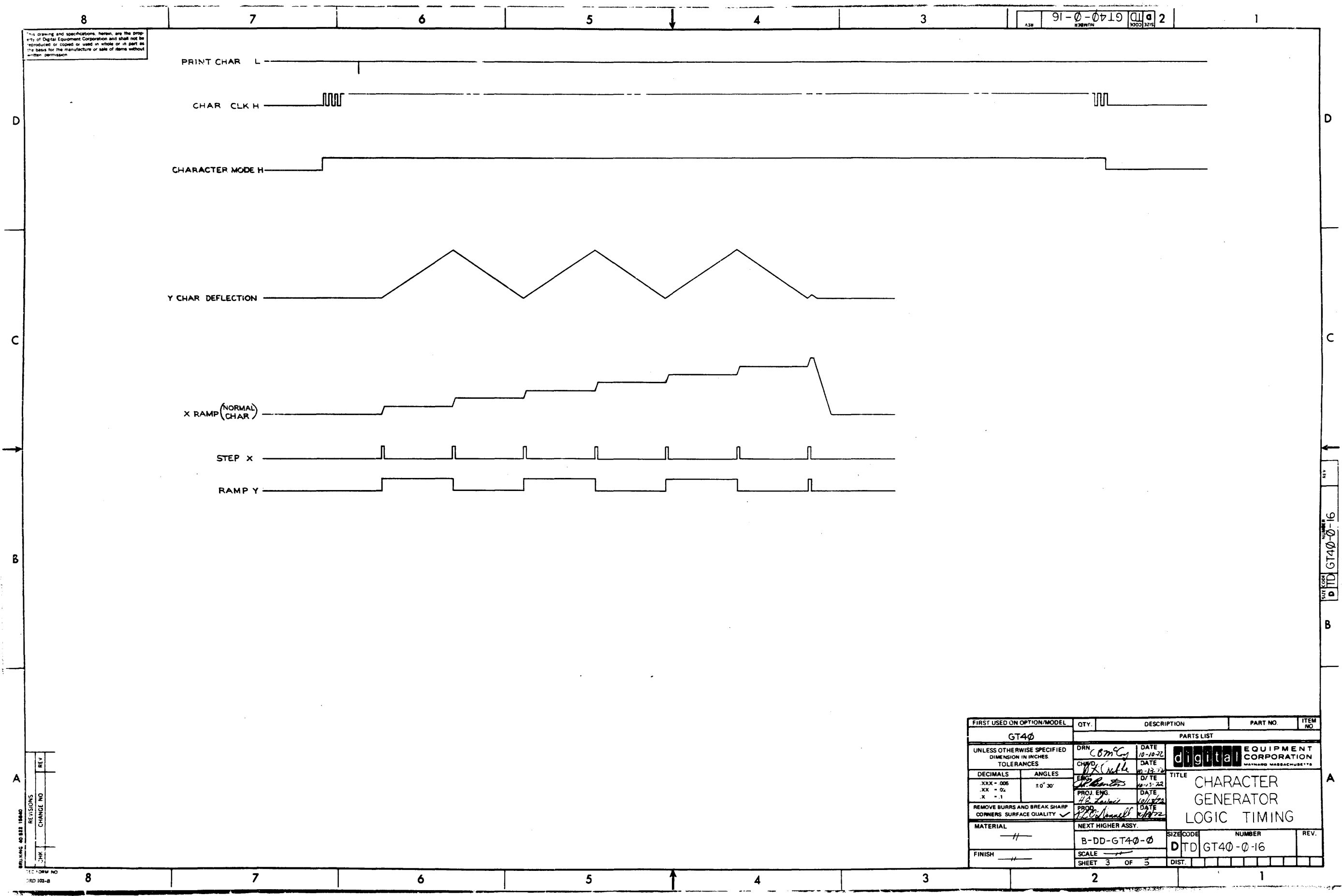
FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
GT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>C. B. Kelly</i> DATE 11-0-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS ANGLES		DATE 11-3-72		
XXX - 006 XX - 02 X - 1	10' 30'	ENGR <i>C. B. Kelly</i> DATE 11-3-72	TITLE CHARACTER GENERATOR LOGIC TIMING	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROJ. ENG. <i>H. J. Jones</i> DATE 11-17-72		
MATERIAL		PROD. <i>H. J. Jones</i> DATE 11-17-72	NEXT HIGHER ASSY.	
FINISH		B-DD-GT40-0	SIZE CODE	NUMBER
		SCALE	DTD	GT40-0-16
		SHEET 2 OF 5	DIST.	

BRUNING 41-522 18840
DEC FORM NO DRD 102-B

REV
CHANGE NO

PART LIST NUMBER
DTD GT40-0-16

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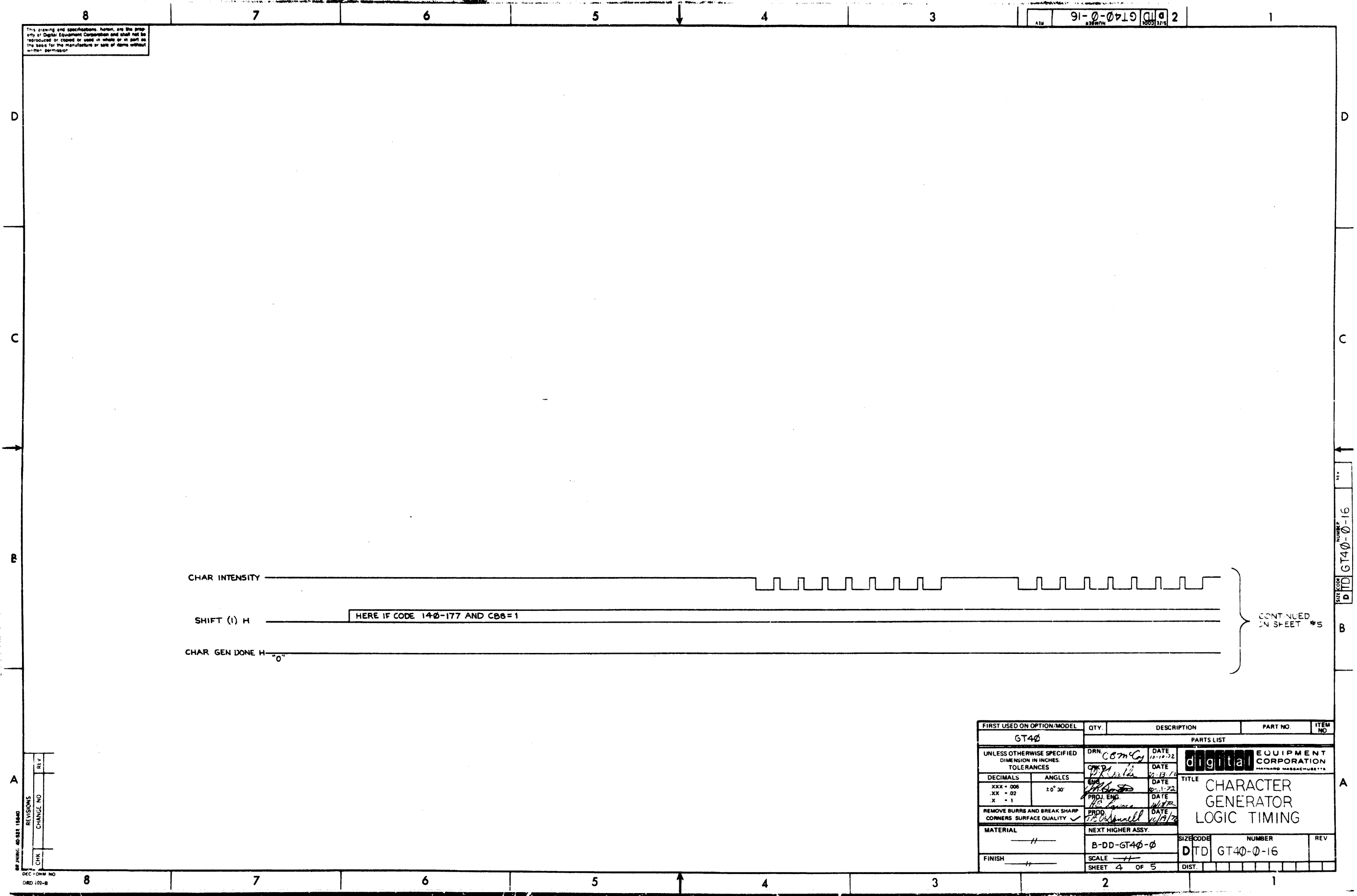
REV. NO.	REV.
CHANGE NO.	
DATE	
BY	
CHK	
REVISED	
40 833 10440	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED	DRN	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DIMENSION IN INCHES	CBM	10-10-72	TITLE CHARACTER GENERATOR LOGIC TIMING	
TOLERANCES	CHKD	10-12-72		
DECIMALS	ENG	10-13-72	SIZE CODE D TD GT40-0-16	
ANGLES	PROJ. ENG.	10-13-72		
.XXX = .005	PROD.	10-13-72	NUMBER GT40-0-16	
.XX = .02	REMOVED	10-13-72		
.X = .1			REV.	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL			SHEET 3 OF 5	
FINISH			DIST.	

REV. NO. GT40-0-16

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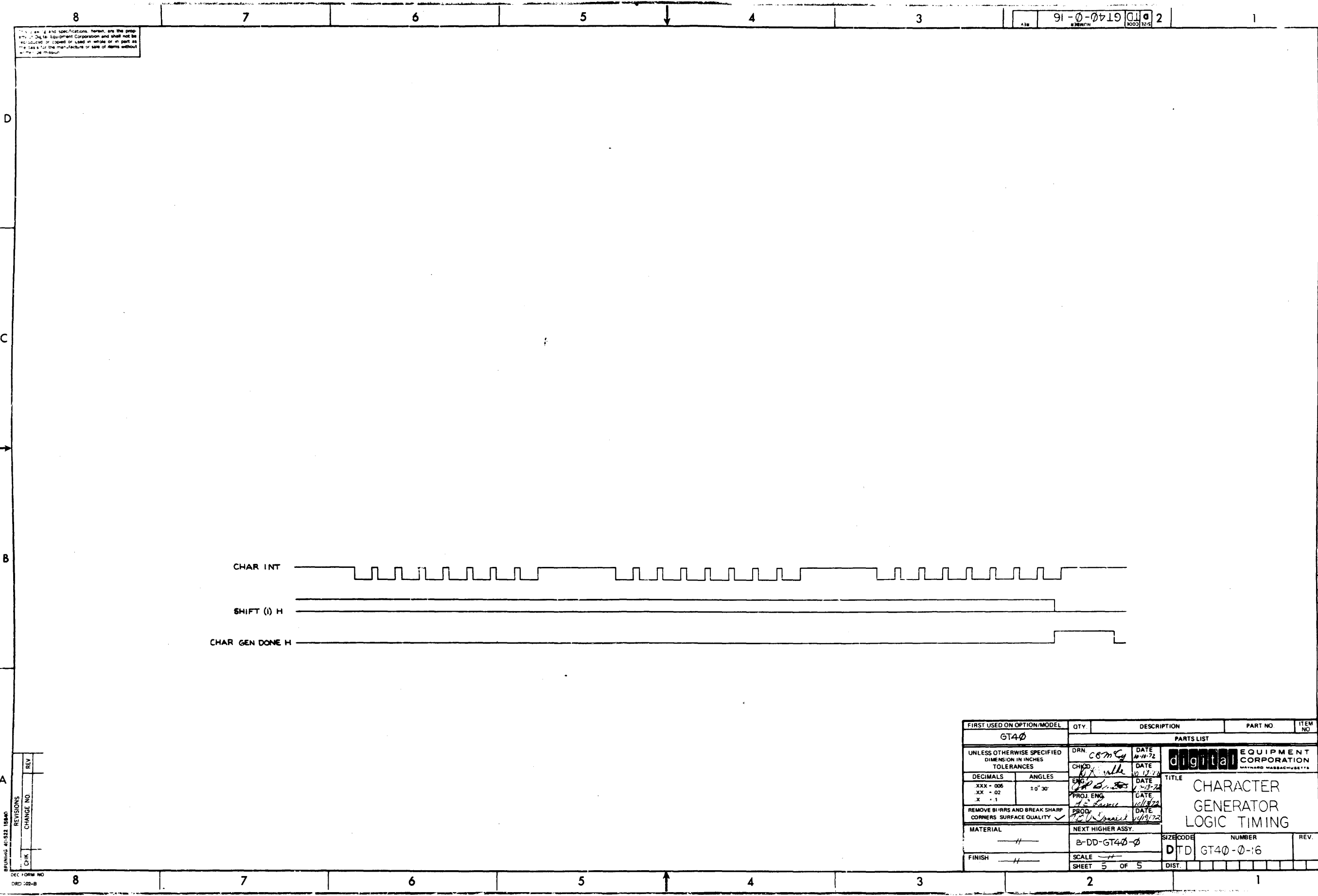
91-0-0719 2



FILE NO. DTD GT40-0-16

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
GT40				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES.		DRN <i>CCM</i>	DATE 12-14-72	digital EQUIPMENT CORPORATION <small>MAYFORD MASSACHUSETTS</small>
TOLERANCES		CHK'D <i>[Signature]</i>	DATE 12-13-72	
DECIMALS	ANGLES	ENG <i>[Signature]</i>	DATE 12-1-72	CHARACTER GENERATOR LOGIC TIMING
xxx - .006	± 0° 30'	PROJ. ENG <i>[Signature]</i>	DATE 11/17/72	
.xx - .02		PROJ. <i>[Signature]</i>	DATE 11/17/72	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD <i>[Signature]</i>	DATE 11/17/72	
MATERIAL		NEXT HIGHER ASSY.		
FINISH		B-DD-GT40-0	SIZE CODE	NUMBER
		SCALE	DTD	GT40-0-16
		SHEET 4 OF 5	DIST.	

REVISIONS
 CHK CHANGE NO RLY
 DEC 1972 NO
 DRD 102-B



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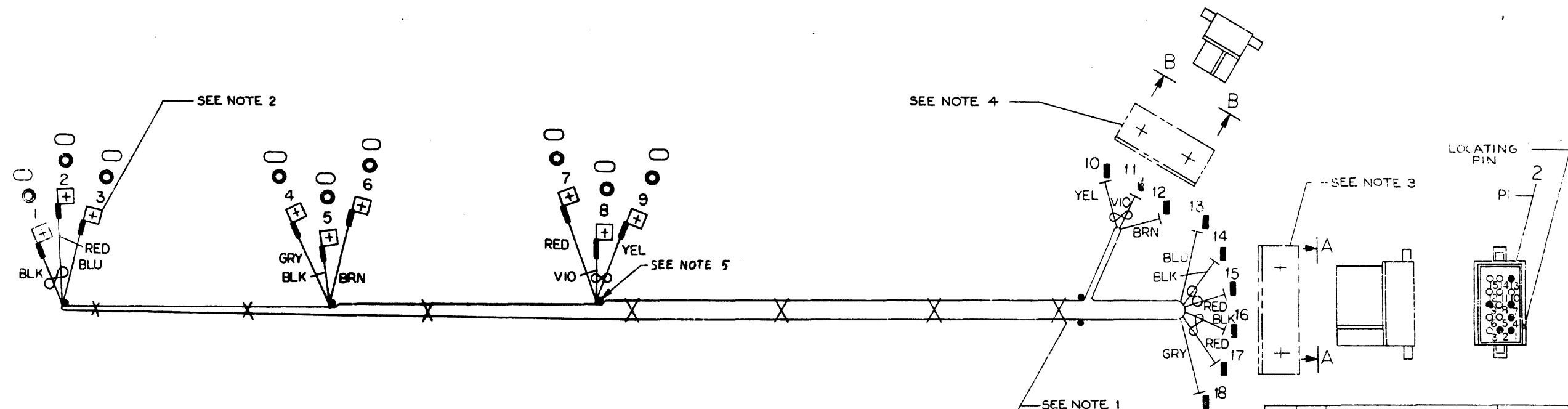
REV	CHANGE NO.
CHK	

FIRST USED ON OPTION/MODEL GT40	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN C.M.C.	DATE 11/17/72	 digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS .XXX - .006 .XX - .02 .X - .1	CHK'D W.L.	DATE 11/17/72		
ANGLES 20° 30'	ENG C.M.C.	DATE 11/17/72	TITLE CHARACTER GENERATOR LOGIC TIMING	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	PROJ. ENG A.C. LAMMIE	DATE 11/17/72		
MATERIAL	NEXT HIGHER ASSY.	SCALE	SIZE CODE	NUMBER
FINISH	B-DD-GT40-0	SCALE 5 OF 5	DTD	GT40-0-16
			DIST.	

DTD GT40-0-16

WIRE TABLE									
ITEM NO	DESCRIPTION	COLOR	FROM			TO			REMARKS
			POINT	CONNECTION	TERM	POINT	CONNECTION	TERM	
7	14 TWP	RED	7		5,6	17	P1-1	3	+5V
		BLK	5			16	P1-7		GND
9	18 AWG	GRY	4			18	P1-2		+15
7	14 TWP	RED	2			15	P1-4		+5
		BLK	1			14	P1-9		GND
11	14 AWG	BLU	3			13	P1-13		-15
10	18 AWG	BRN	6			12	P2-2		LINE CLOCK
8	18 TWP	VIO	8			11	P2-3		DC LO
		YEL	9		5,6	10	P2-4	3	AC LO

- NOTES:
- USE TIE WRAPS (X) ITEM 4 APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY, AND AT EVERY BREAK-OUT POINT.
 - ATTACH MALE FASTON DEC 9008219-0 WITH #4 WOOD SCREWS (9 PLACES).
 - USE CONN. BRKT C-MD-9305761-H15-0 MOUNT WITH #6 WOOD SCREWS. USE MATING CONN. 1209350-15.
 - USE CONN. BRKT C-MD-9305761-H6-0 MOUNT WITH #6 WOOD SCREWS. USE MATING CONN. 1209350-06.
 - DOT (•) INDICATES NAIL LOCATIONS FOR ASSEMBLY USE ONLY. COVER NAILS WITH SHRINK TUBING TO PREVENT CUTTING HARNESS.



DO NOT REDUCE
SCALE
6 IN.

DO NOT BUILD FROM REDUCED PRINT

SYM	QTY.	DESCRIPTION	PART NO	ITEM NO.
A/R		WIRE, #14 AWG BLU	9107370-66	11
A/R		WIRE, #18 AWG BRN	9107360-11	10
A/R		WIRE, #18 AWG GRY	9107360-88	9
A/R		WIRE, #18 TWP YEL/VIC	9107430-47	8
A/R		WIRE, #14 TWP BLK/RED	9107440-02	7
○		A/R TUBING, SHRINK	9107305-02	6
⊙	9	CONN., SOLDERLESS	9009262-0	5
X		A/R WRAP, TIE	9007031	4
■	9	PIN, MALE	1209378-01	3
□	1	HOUSING, CONN. 13 PIN	1209351-15	2
□	1	HOUSING, CONN. 6 PIN	1209351-06	1

FIRST USED ON OPT/MOD	SYM	QTY.	DESCRIPTION	PART NO	ITEM NO.
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN	DATE	digital EQUIPMENT CORPORATION	
DECIMALS	ANGLES	ENG	DATE	TITLE	
XXX - 005		PROJ. ENG.	DATE	POWER HARNESS	
XX - 02	±0° 30'	PROD. ENG.	DATE	DA11-F/DD11-B	
X - 1		DATE	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	DATE		
MATERIAL		NEXT HIGHER ASSY.		SIZE/COLOR	NUMBER
SEE PARTS LIST				SCALE	REV
				1/1	DIA7009563-0-0
				SHEET	DIST
				1	

DRAWING NUMBER DIA7009563-0-0