

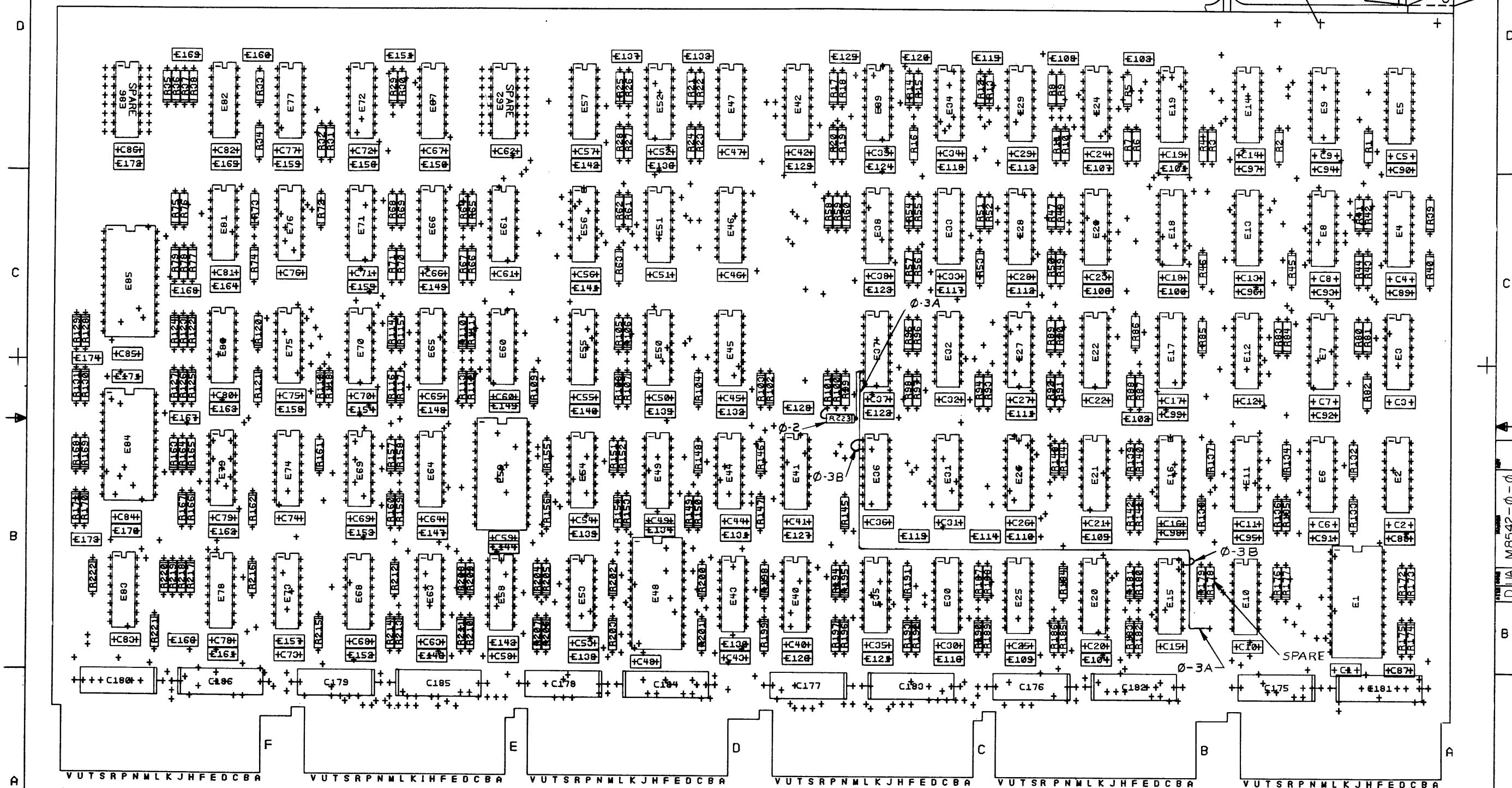
[illegible]

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18(QTY 12)

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NOTES :

CHANCE	NO	BEV
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ETCH REV.
P.C. DESIGN DATA BASE REV.

SIGNATURES		DATE	digital			
DRN. RW Cooney		7 MAY 76				
CHK'D. <i>[Signature]</i>		7 MAY 76				
ENG. Tom Spivey		15 OCT 76	TITLE VIRTUAL MEMORY ADDRESS			
PROJ. ENG. Tom Spivey		15 OCT 76				
PROD. Bill Gable		15 OCT 76				
SCALE 2/11						
SHT. 2 OF 5		SIZE CODE	NUMBER	REV		
NEXT HIGHER ASSY. B-DD-MB542-0A		0	MB542-0-0			

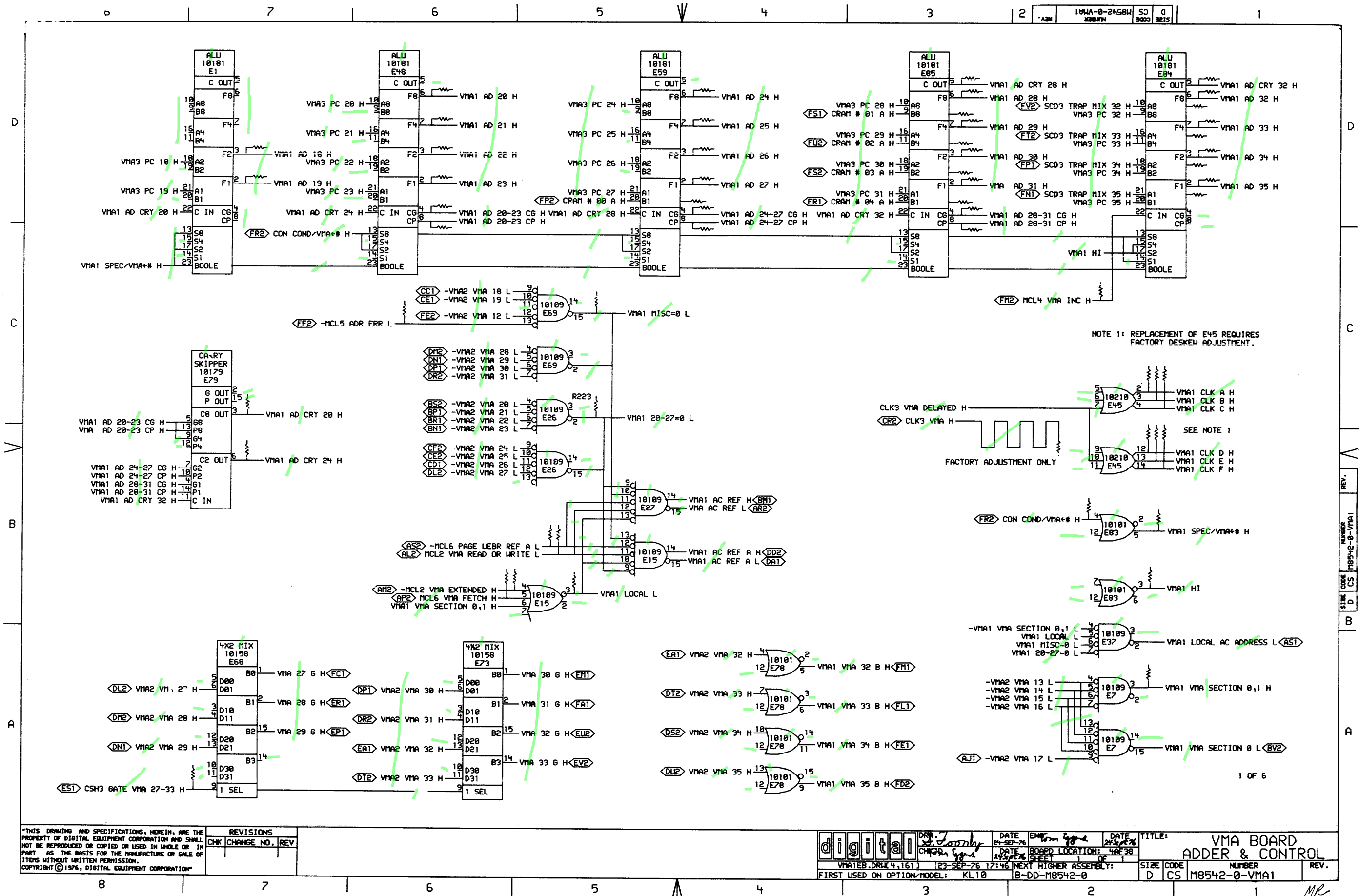
Diag FN 16x \Rightarrow M8537 EBUS Reg
E<0:8>, E<34:35> always

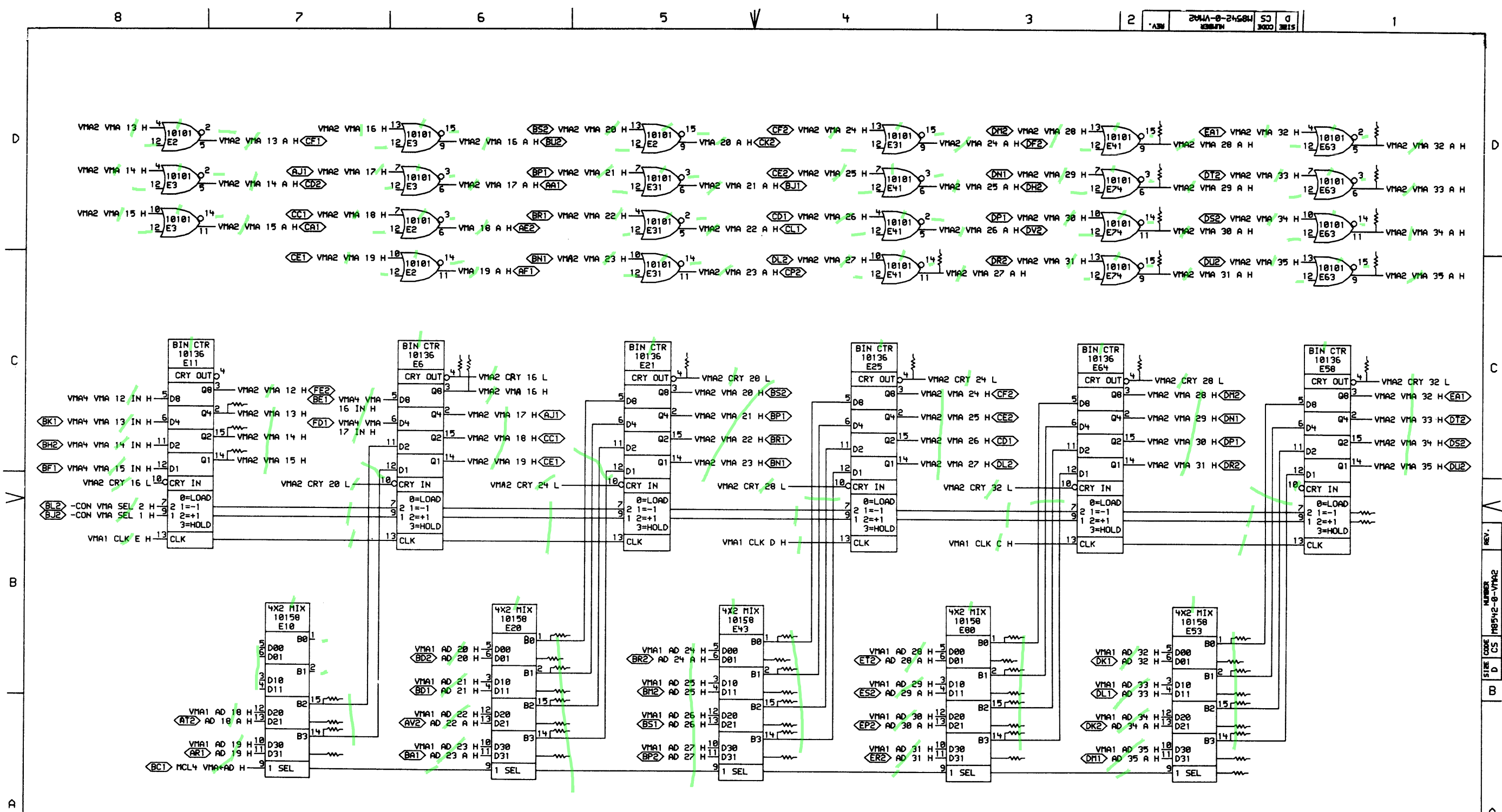
$E<34:35> := PMA<34:35>$

M8518 PMA if EBOX REQ GRANT (6) $PMA<35> = VMA2 VMA35$
if EBOX BRA GRANT (4) $PMA<35> = PMA4 BRA35$
 $\underline{\underline{2}}$

$PMA4 BRA35 := SBUS ADR<35>$

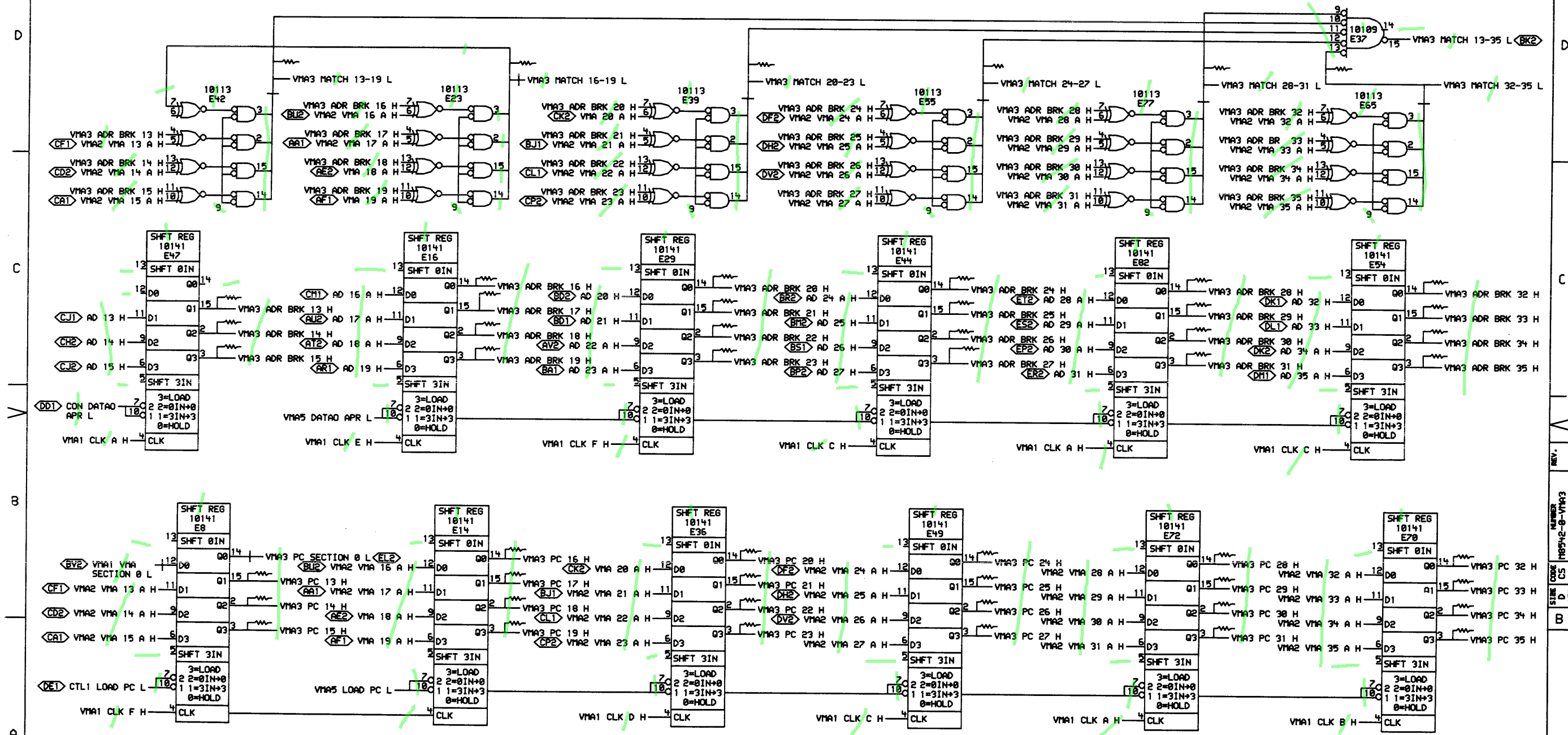
M8542 VMA ADR<35> output of 10181 ALU





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VMA2B.RLS4.161		119-SEP-76 17:23		NEXT HIGHER ASSEMBLY:		SIZE CODE NUMBER		REV.	
FIRST USED ON OPTION/MODEL: KL10		B-DD-M8542-0		D CS M8542-0-VMA2					

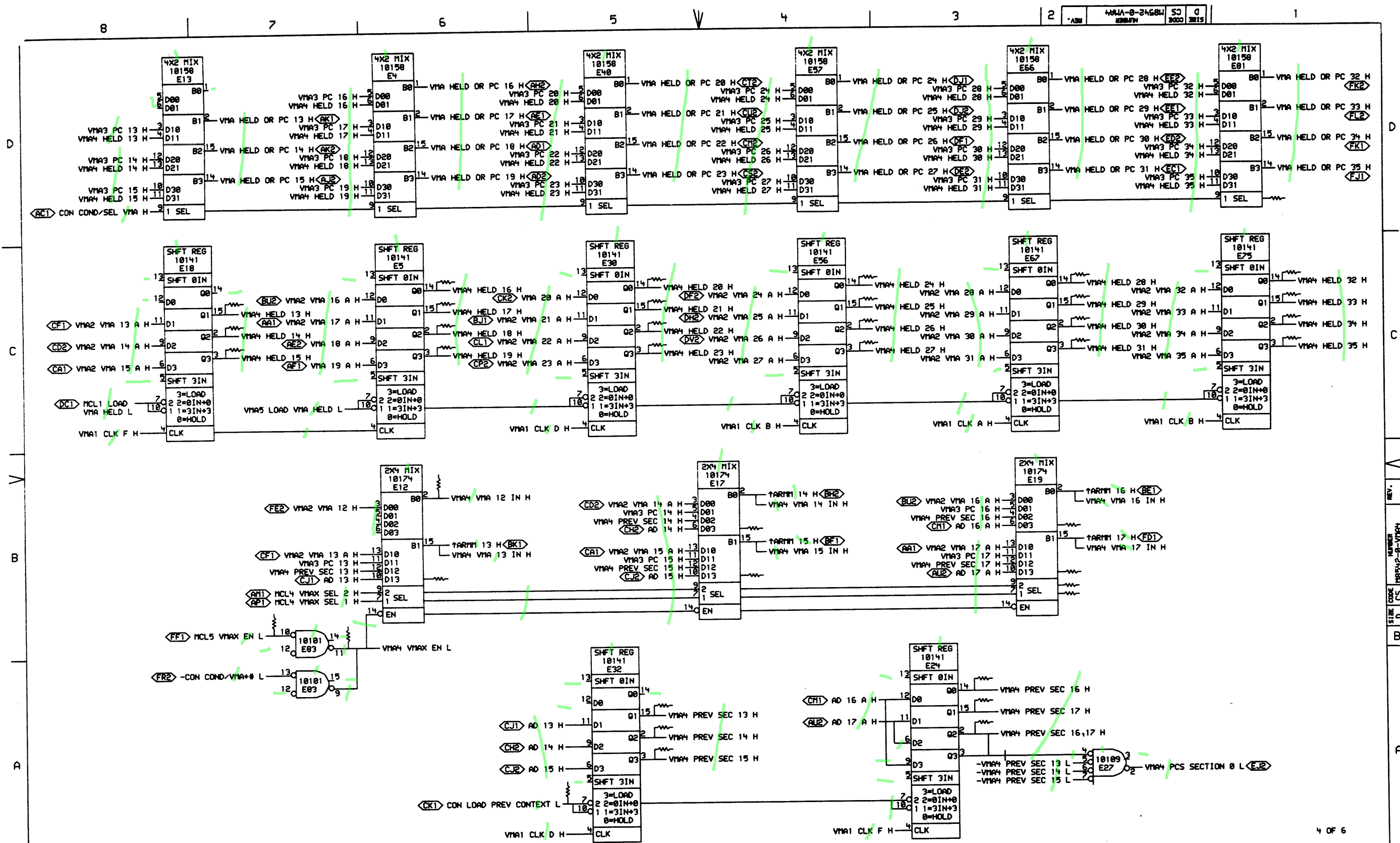


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REVISIONS		
CHK	CHANGE NO.	REV

digital	DATE 11-9-76	ENG. 11-9-76	DATE 11-9-76	TITLE: VMA BOARD
	11-9-76	11-9-76	11-9-76	PC & ADR BRK REG
	11-9-76	11-9-76	11-9-76	
FIRST USED ON OPTION/MODEL: KL10		NEXT HIGHER ASSEMBLY: B-DD-M8542-0		SIZE CODE NUMBER REV.
				D CS M8542-0-VMA3

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REVISIONS	
CHK	CHANGE NO. REV

DATE: 23 SEP 76
ENG: Tom Egge
DATE: 23 SEP 76
CHK: Tom Egge
DATE: 23 SEP 76
SHEET: 1 OF 1

TITLE: VMA BOARD
VMA HELD REG

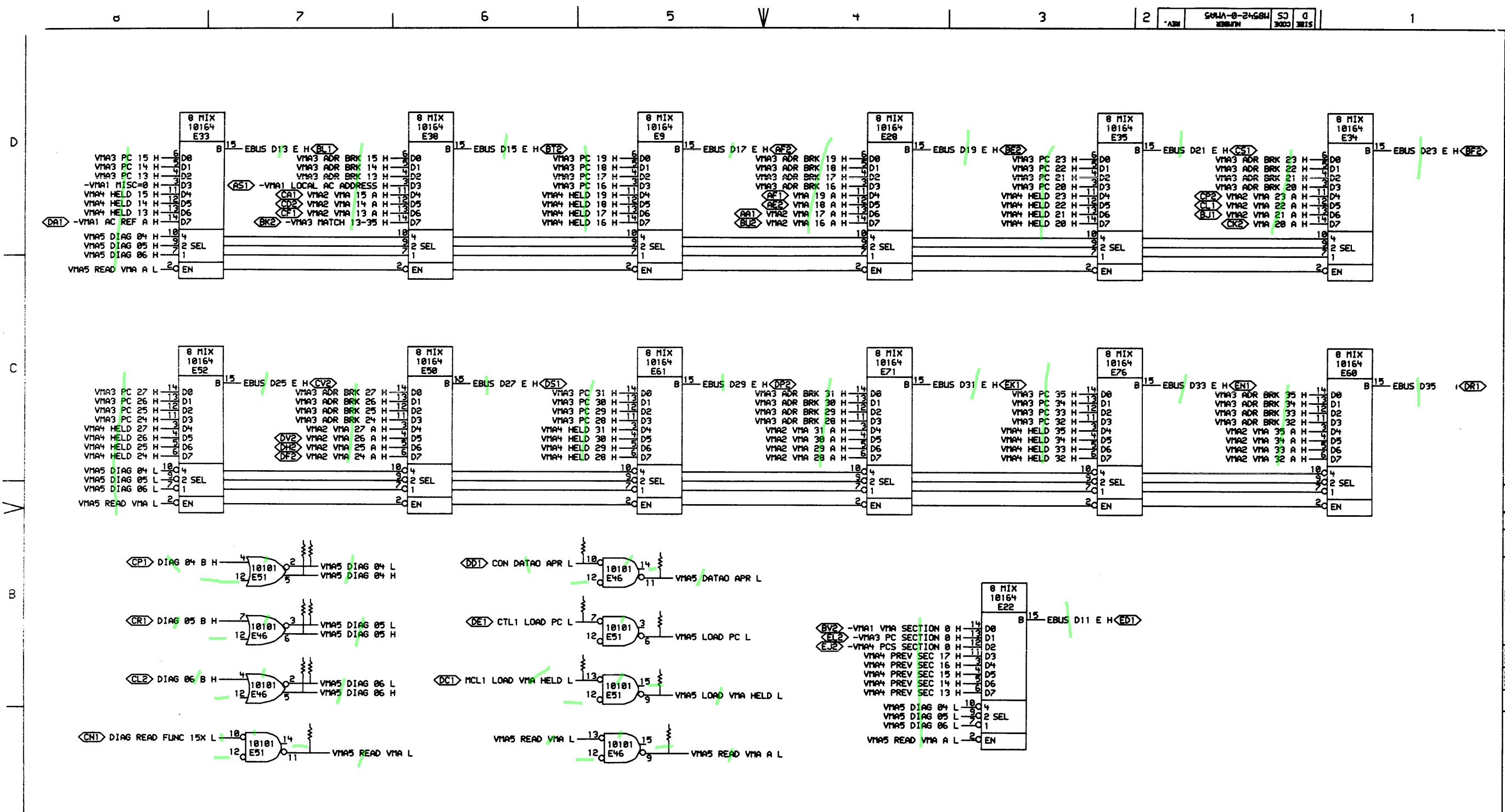
SIZE	CODE	NUMBER	REV.
D	CS	M8542-0-VMA4	

DATE: 19 SEP 76 10:37
VMA4-BLS4.161
FIRST USED ON OPTION MODEL: KL10

DATE: 23 SEP 76
ENG: Tom Egge
DATE: 23 SEP 76
CHK: Tom Egge
DATE: 23 SEP 76
SHEET: 1 OF 1

BOARD LOCATION: 40F38
NEXT HIGHER ASSEMBLY: B-DD-M8542-0

MK



RESISTOR LOC(PIN)	SHOWN ON DRW#	REF	VALUE	TERMINATES SIGNAL
R134(1)	VMA2	A7	68n	%E10(14)
R133(1)	VMA2	A7	68n	%E10(15)
R144(1)	VMA2	B6	68n	%E20(1)
R139(1)	VMA2	A6	68n	%E20(14)
R140(1)	VMA2	A6	68n	%E20(15)
R143(1)	VMA2	B6	68n	%E20(2)
R108(1)	VMA2	B4	68n	%E43(1)
R109(1)	VMA2	A4	68n	%E43(14)
R190(1)	VMA2	A4	68n	%E43(15)
R107(1)	VMA2	B4	68n	%E43(2)
R209(1)	VMA2	B2	68n	%E53(1)
R213(1)	VMA2	A2	68n	%E53(14)
R210(1)	VMA2	A2	68n	%E53(15)
R214(1)	VMA2	B2	68n	%E53(2)
R150(1)	VMA2	B3	68n	%E80(1)
R116(1)	VMA2	A3	68n	%E80(14)
R117(1)	VMA2	A3	68n	%E80(15)
R160(1)	VMA2	B3	68n	%E80(2)
R17(1)	VMA4	B6	68n	AD 13 H
R18(1)	VMA4	B4	68n	AD 14 H
R24(1)	VMA4	B4	68n	AD 15 H
R5(1)	VMA4	B2	68n	AD 16 A H
R9(1)	VMA4	B2	68n	AD 17 A H
R130(1)	VMA2	A7	68n	AD 18 A H
R141(1)	VMA2	A7	68n	AD 19 H
R8(1)	VMA2	B6	68n	AD 20 H
R10(1)	VMA2	B6	68n	AD 21 H
R11(1)	VMA2	A6	68n	AD 22 A H
R12(1)	VMA2	A6	68n	AD 23 A H
R102(1)	VMA2	B4	68n	AD 24 A H
R140(1)	VMA2	B4	68n	AD 25 H
R147(1)	VMA2	A4	68n	AD 26 H
R104(1)	VMA2	A4	68n	AD 27 H
R33(1)	VMA2	B3	68n	AD 28 A H
R34(1)	VMA2	B3	68n	AD 29 A H
R35(1)	VMA2	A3	68n	AD 30 A H
R30(1)	VMA2	A3	68n	AD 31 H
R151(1)	VMA2	B2	68n	AD 32 H
R152(1)	VMA2	B2	68n	AD 33 H
R154(1)	VMA2	A2	68n	AD 34 A H

NOTE:

1. ALL TERMINATORS HAVE PIN TWO CONNECTED TO -2.0V AND ARE 5% 1/4WATT UNLESS OTHERWISE SPECIFIED
2. ENTRIES ARE SORTED BY SIGNAL NAME
3. % INDICATES OUTPUT OF DIP LOC AND () INDICATES PIN NUMBER

RESISTOR LOC(PIN)	SHOWN ON DRW#	REF	VALUE	TERMINATES SIGNAL
R156(1)	VMA2	A2	68n	AD 35 A H
R103(1)	VMA1	B2	68n	CLK3 VMA H
R197(1)	VMA4	D1	68n	CON COND/SEL VMA H
R201(1)	VMA1	B2	68n	CON COND/VMA+ H
R23(1)	VMA5	B5	68n	-CON DATA0 APR H
R7(1)	VMA4	A5	68n	-CON LOAD PREV CONTEXT H
R211(1)	VMA2	B1	68n	-CON VMA SEL 1 H
R159(1)	VMA2	B1	68n	-CON VMA SEL 2 H
R155(1)	VMA1	D4	68n	CRAM # 00 A H
R131(1)	VMA1	D3	68n	CRAM # 01 A H
R130(1)	VMA1	D3	68n	CRAM # 02 A H
R79(1)	VMA1	D3	68n	CRAM # 03 A H
R129(1)	VMA1	D3	68n	CRAM # 04 A H
R215(1)	VMA1	A7	68n	CSH3 GATE VMA 27-33 H
R45(1)	VMA5	B5	68n	-CTL1 LOAD PC H
R46(1)	VMA5	B5	68n	-MCL1 LOAD VMA HELD H
R101(1)	VMA1	B5	68n	-MCL2 VMA EXTENDED H
R09(1)	VMA1	B5	68n	-MCL2 VMA READ OR WRITE H
R163(1)	VMA1	C2	68n	MCL4 VMA INC H
R6(1)	VMA4	B2	68n	MCL4 VMA SEL 1 H
R4(1)	VMA4	B2	68n	MCL4 VMA SEL 2 H
R121(1)	VMA2	A2	68n	MCL4 VMA+AD H
R161(1)	VMA1	C6	68n	MCL5 ADR ERR H
R221(1)	VMA4	B7	68n	-MCL5 VMA EN H
R93(1)	VMA1	B5	68n	MCL6 PAGE UEBR REF A H
R100(1)	VMA1	B6	68n	MCL6 VMA FETCH H
R170(1)	VMA1	D1	68n	SCD3 TRAP MIX 32 H
R171(1)	VMA1	D1	68n	SCD3 TRAP MIX 33 H
R160(1)	VMA1	D1	68n	SCD3 TRAP MIX 34 H
R164(1)	VMA1	D1	68n	SCD3 TRAP MIX 35 H
R223(1)	VMA1	C5	68n	-VMA1 20-27=0 H
R176(1)	VMA1	D7	68n	VMA1 AD 18 H
R177(1)	VMA1	D7	68n	VMA1 AD 19 H
R105(1)	VMA1	D6	68n	VMA1 AD 20 H
R217(1)	VMA1	D6	68n	VMA1 AD 20-23 CG H
R216(1)	VMA1	C6	68n	VMA1 AD 20-23 CP H
R104(1)	VMA1	D6	68n	VMA1 AD 21 H
R102(1)	VMA1	D6	68n	VMA1 AD 22 H
R103(1)	VMA1	D6	68n	VMA1 AD 23 H
R203(1)	VMA1	D4	68n	VMA1 AD 24 H

RESISTOR LOC(PIN)	SHOWN ON DRW#	REF	VALUE	TERMINATES SIGNAL
R166(1)	VMA1	D4	68n	VMA1 AD 24-27 CG H
R167(1)	VMA1	C4	68n	VMA1 AD 24-27 CP H
R150(1)	VMA1	D4	68n	VMA1 AD 25 H
R149(1)	VMA1	D4	68n	VMA1 AD 26 H
R146(1)	VMA1	D4	68n	VMA1 AD 27 H
R127(1)	VMA1	D3	68n	VMA1 AD 28 H
R165(1)	VMA1	D3	68n	VMA1 AD 28-31 CG H
R162(1)	VMA1	C3	68n	VMA1 AD 28-31 CP H
R122(1)	VMA1	D3	68n	VMA1 AD 29 H
R126(1)	VMA1	D3	68n	VMA1 AD 30 H
R125(1)	VMA1	D3	68n	VMA1 AD 31 H
R205(1)	VMA1	D1	68n	VMA1 AD 32 H
R200(1)	VMA1	D1	68n	VMA1 AD 33 H
R204(1)	VMA1	D1	68n	VMA1 AD 34 H
R207(1)	VMA1	D1	68n	VMA1 AD 35 H
R173(1)	VMA1	C7	68n	VMA1 AD CRY 20 H
R153(1)	VMA1	B7	68n	VMA1 AD CRY 24 H
R109(1)	VMA1	D3	68n	VMA1 AD CRY 28 H
R124(1)	VMA1	D1	68n	VMA1 AD CRY 32 H
R37(1)	VMA1	C2	68n	VMA1 CLK A H
R120(1)	VMA1	C2	68n	VMA1 CLK B H
R157(1)	VMA1	C2	68n	VMA1 CLK C H
R57(1)	VMA1	B2	68n	VMA1 CLK D H
R132(1)	VMA1	B2	68n	VMA1 CLK E H
R13(1)	VMA1	B2	68n	VMA1 CLK F H
R219(1)	VMA1	B2	68n	VMA1 HI
R100(1)	VMA1	B5	68n	-VMA1 LOCAL H
R179(1)	VMA1	C5	68n	-VMA1 MISC=0 H
R174(1)	VMA1	B2	68n	VMA1 SPEC/VMA+ H
R95(1)	VMA1	A2	68n	VMA1 VMA SECTION 0,1 H
R136(1)	VMA2	C6	68n	-VMA2 CRY 16 H
R135(1)	VMA2	C5	68n	-VMA2 CRY 20 H
R142(1)	VMA2	C4	68n	-VMA2 CRY 24 H
R105(1)	VMA2	C2	68n	-VMA2 CRY 28 H
R212(1)	VMA2	C1	68n	-VMA2 CRY 32 H
R04(1)	VMA2	C7	68n	VMA2 VMA 13 H
R01(1)	VMA2	C7	68n	VMA2 VMA 14 H
R02(1)	VMA2	C7	68n	VMA2 VMA 15 H
R00(1)	VMA2	C6	68n	VMA2 VMA 16 H
R03(1)	VMA2	C3	68n	VMA2 VMA 27 A H

RESISTOR LOC(PIN)	SHOWN ON DRW#	REF	VALUE	TERMINATES SIGNAL
R31(1)	VMA2	D2	68n	VMA2 VMA 28 A H
R32(1)	VMA2	D2	68n	VMA2 VMA 29 A H
R30(1)	VMA2	D2	68n	VMA2 VMA 30 A H
R29(1)	VMA2	C2	68n	VMA2 VMA 31 A H
R112(1)	VMA2	D1	68n	VMA2 VMA 32 A H
R111(1)	VMA2	D1	68n	VMA2 VMA 33 A H
R119(1)	VMA2	D1	68n	VMA2 VMA 34 A H
R118(1)	VMA2	C1	68n	VMA2 VMA 35 A H
R50(1)	VMA3	C7	68n	VMA3 ADR BRK 13 H
R60(1)	VMA3	C7	68n	VMA3 ADR BRK 14 H
R59(1)	VMA3	C7	68n	VMA3 ADR BRK 15 H
R40(1)	VMA3	C6	68n	VMA3 ADR BRK 16 H
R50(1)	VMA3	C6	68n	VMA3 ADR BRK 17 H
R47(1)	VMA3	C6	68n	VMA3 ADR BRK 18 H
R49(1)	VMA3	C6	68n	VMA3 ADR BRK 19 H
R19(1)	VMA3	C5	68n	VMA3 ADR BRK 20 H
R15(1)	VMA3	C5	68n	VMA3 ADR BRK 21 H
R14(1)	VMA3	C5	68n	VMA3 ADR BRK 22 H
R16(1)	VMA3	C5	68n	VMA3 ADR BRK 23 H
R100(1)	VMA3	C4	68n	VMA3 ADR BRK 24 H
R105(1)	VMA3	C4	68n	VMA3 ADR BRK 25 H
R106(1)	VMA3	C4	68n	VMA3 ADR BRK 26 H
R107(1)	VMA3	C4	68n	VMA3 ADR BRK 27 H
R71(1)	VMA3	C2	68n	VMA3 ADR BRK 28 H
R70(1)	VMA3	C2	68n	VMA3 ADR BRK 29 H
R60(1)	VMA3	C2	68n	VMA3 ADR BRK 30 H
R69(1)	VMA3	C2	68n	VMA3 ADR BRK 31 H
R115(1)	VMA3	C1	68n	VMA3 ADR BRK 32 H
R114(1)	VMA3	C1	68n	VMA3 ADR BRK 33 H
R110(1)	VMA3	C1	68n	VMA3 ADR BRK 34 H
R113(1)	VMA3	C1	68n	VMA3 ADR BRK 35 H
R90(1)	VMA3	D7	68n	-VMA3 MATCH 13-19 H
R20(1)	VMA3	D6	68n	-VMA3 MATCH 16-19 H
R96(1)	VMA3	D5	68n	-VMA3 MATCH 20-23 H
R101(1)	VMA3	D3	68n	-VMA3 MATCH 24-27 H
R97(1)	VMA3	D2	68n	-VMA3 MATCH 28-31 H
R99(1)	VMA3	D2	68n	-VMA3 MATCH 32-35 H
R54(1)	VMA3	B7	68n	VMA3 PC 13 H
R55(1)	VMA3	B7	68n	VMA3 PC 14 H
R56(1)	VMA3	B7	68n	VMA3 PC 15 H

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REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN. <i>C. Smith</i>	DATE <i>19-SEP-76</i>	ENG. <i>Tom Igona</i>	DATE <i>23-SEP-76</i>	TITLE: VMA BOARD TERMINATORS
	CHK. <i>John Igona</i>	DATE <i>23-SEP-76</i>	BOARD LOCATION: <i>1</i>	SHEET <i>1</i> OF <i>2</i>	
FIRST USED ON OPTION MODEL: <i>KL10</i>		NEXT HIGHER ASSEMBLY: <i>B-DD-M8542-0</i>		SIZE CODE <i>D CS</i>	NUMBER <i>M8542-0-RES</i>
					REV. <i>MR</i>

7		6		5		4		3		2		1	