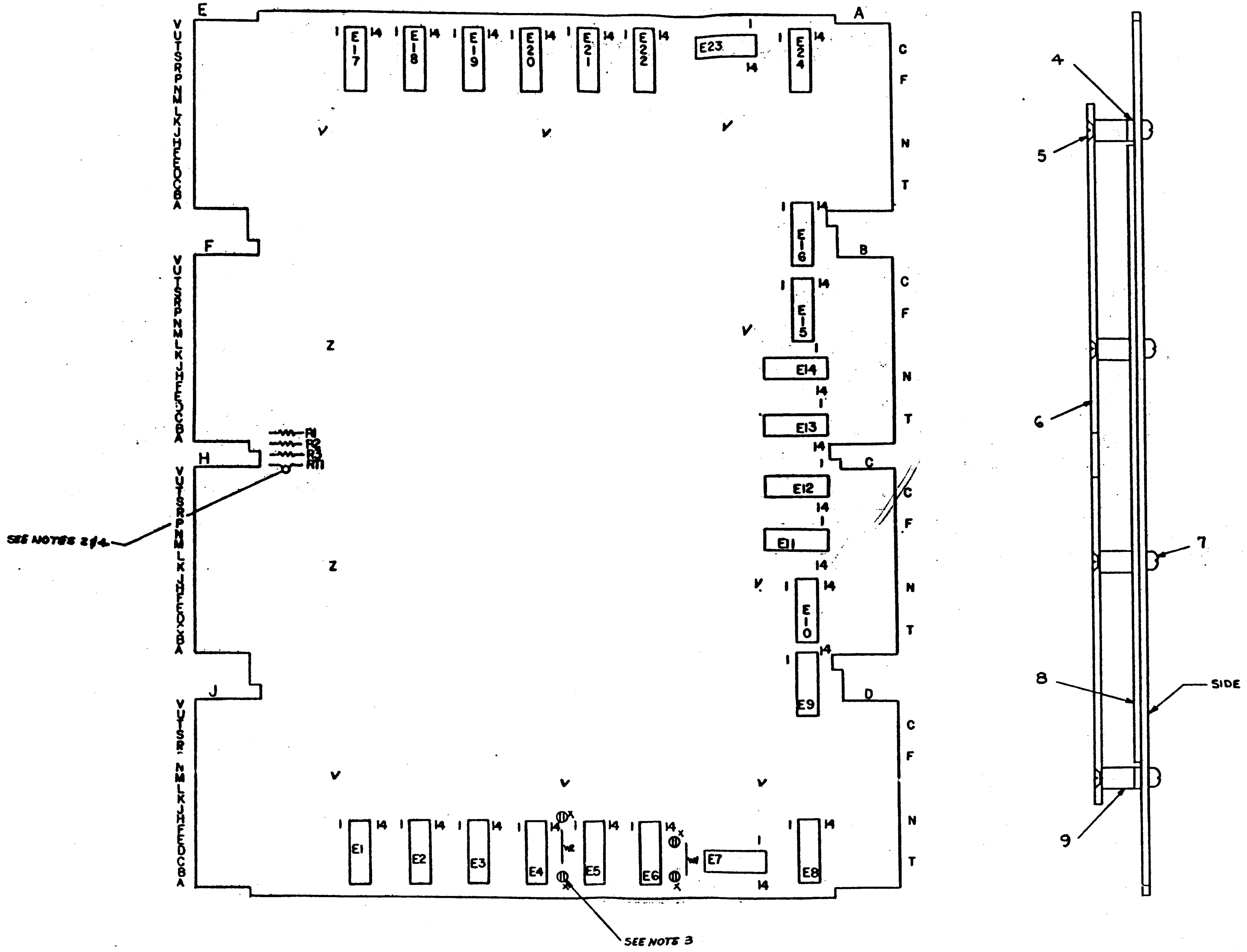
NOTES:
1. ALL COMPONENT LEADS TO BE LESS THAN 1/16 INCH LONG ON SIDE 2 OF MODULE.
2. RT1 TO LAY FLAT AS SHOWN.
3. THE 4 SPLIT LUGS (X) ARE OPTIONAL.
4. VALUES OF R1, R2, R3 AND RT1 ARE SHOWN ON STACK BOARD DWG G646 AND NOTED HERE FOR CONVENIENCE:
   - R1: 562Ω, 1/8W, 1%
   - R2: 9.76KΩ, 1/8W, 1%
   - R3: 147Ω, 1/8W, 1%
   - RT1: 1K THER.
5. 2501-1 (DEC. PT. NO. 1910010-01) MAY BE USED INTERCHANGEABLY WITH ITEM #2
6. ALLOWABLE MEMORY SYSTEM CONFIGURATIONS

MMB-EJ	MMB-EH
H212 OR H212A STACK	H211 OR H211A STACK
G111 OR G115 S/I	G115 S/I
G233 OR G234 X-Y	G234 X-Y



QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
12		8192-CORE MATS (STRUNG)	VENDOR SUPPLIED	11
1		STICKER WITH DEC PART NO.	VENDOR SUPPLIED	10
10		STANDOFF, 4-40 x 1/4 DIA x 1/4 LG.	VENDOR SUPPLIED	9
1		SUBSTRATE	VENDOR SUPPLIED	8
10		SCREW, NYLON FILLISTER 4-40 x 3/16	VENDOR SUPPLIED	7
1		COVER PLATE	VENDOR SUPPLIED	6
10		SCREW, FLAT HEAD NYLON 4-40 x 3/16	VENDOR SUPPLIED	5
4		WASHER, NYLON	VENDOR SUPPLIED	4
2		INSULATED JUMPER	VENDOR SUPPLIED	3
24	E1-E24	IC DEC 2501 (SEE NOTE 5)	1910010	2
		STACK BOARD	A-PL-G646-0-0	1

PARTS LIST

ETCH BOARD REV: C

FIRST USED ON: MMB-EJ

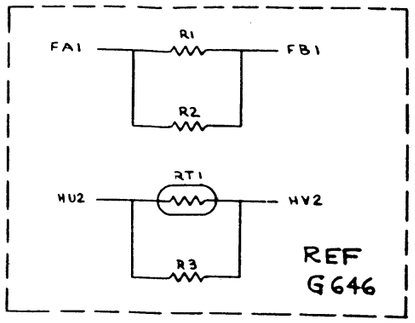
[redacted] EQUIPMENT CORPORATION

STACK SCHEMATIC

8K X 12 BIT

B-DD-MMB-EJ

E CS H212-0-1

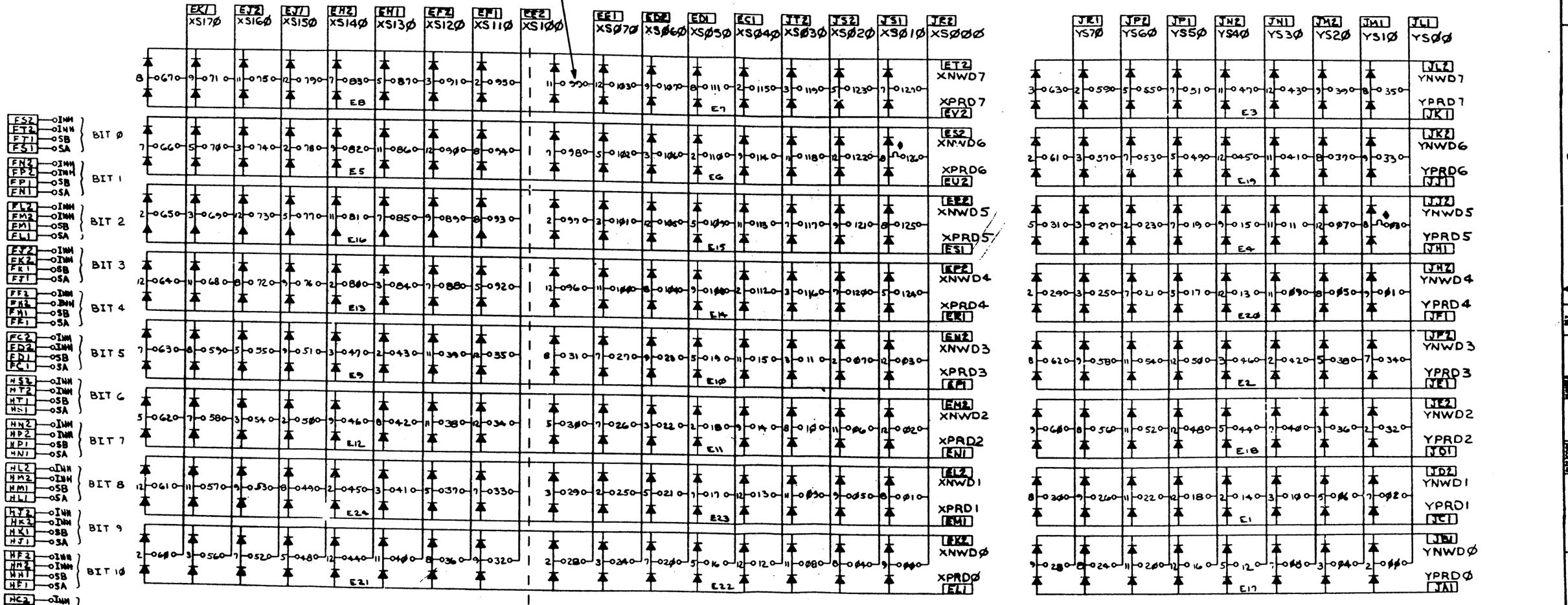


ETCH JUMPERS

JV2	HB1
JU2	HA1
EB1	EV2
EA1	EU2

NOTES:
1. UNLESS OTHERWISE SPECIFIED:
   IC'S E1-E24 ARE TO BE DEC STOCK# 2501.
2. INDICATES STACK LINE NUMBER. (TYP)
3. ♦ INDICATES CURRENT LOOP.
4. —o INDICATES MAGNET WIRE TERMINATION(SOLDERED TO PC PAD).
5. 2501-1 (DEC.PT. NO. 1910010-01) MAY BE USED INTERCHANGEABLY WITH ITEM #2

SEE NOTE 4



FIRST USED ON ASSEMBLY/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM8-EJ		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES. TOLERANCES
DECIMALS: .XXX ± .010, .XX ± .02, .X ± .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL —//—
FINISH —//—

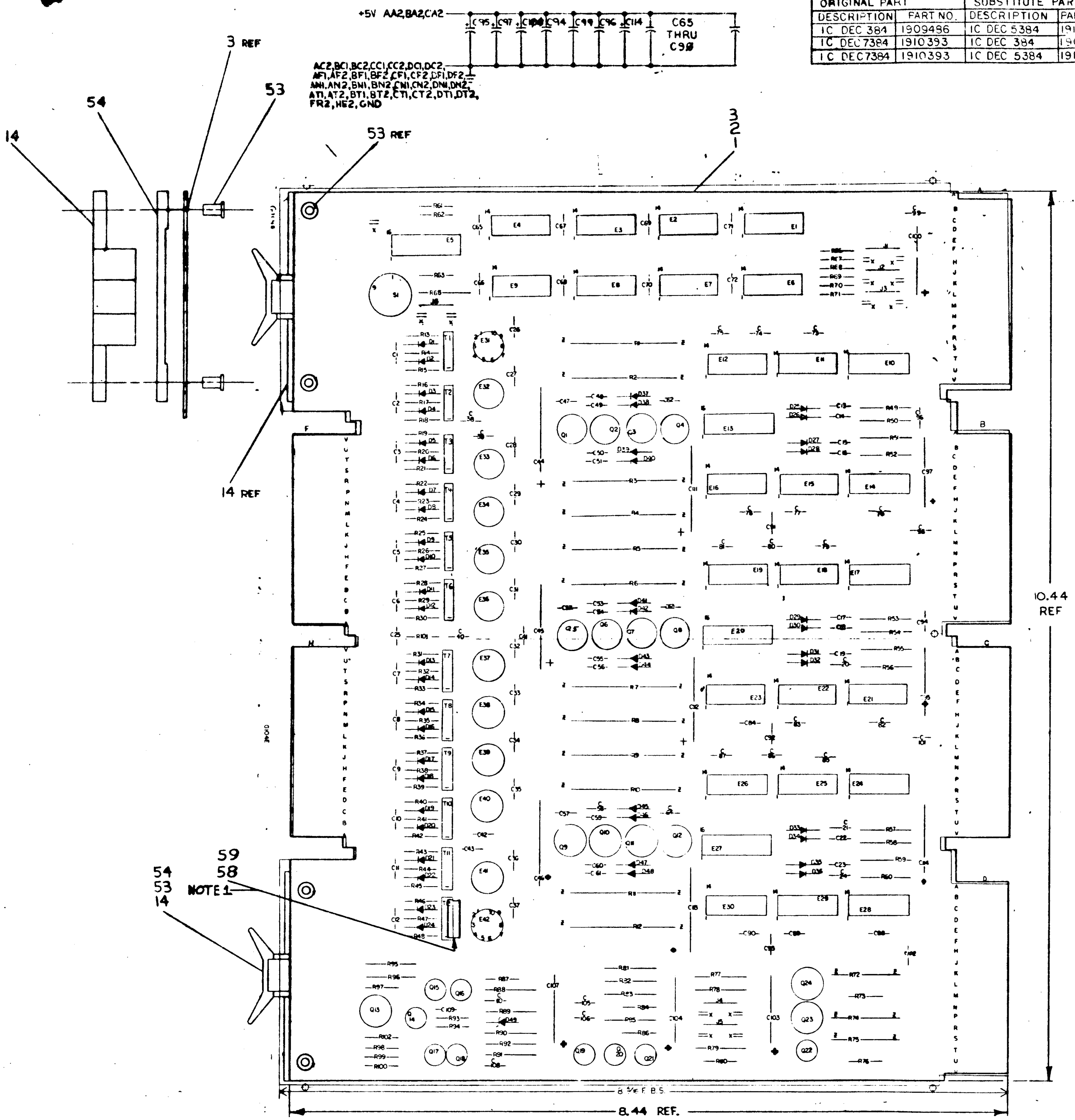
		DATE
DRN		12/1/71
CHK'D		3-29-72
ENGR		
FINAL ENGR		
PROJ		3/2/72
NEXT HIGHER ASSY.	B-DD-MM8-EJ	
SCALE	—	
SHEET	2 OF 2	

digital EQUIPMENT CORPORATION

TITLE: STACK SCHEMATIC 8K X 12BIT

SIZE D | CODE CS | NUMBER H212-Ø-1 | REV. E | DIST.

REV.	REVISIONS	CHANGE NO.	CHK



COMPONENT SUBSTITUTION LIST				
ORIGINAL PART		SUBSTITUTE PART		ITEM NO.
DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	
IC DEC 384	1909486	IC DEC 5384	1910394	50
IC DEC7384	1910393	IC DEC 384	1909486	65
IC DEC7384	1910393	IC DEC 5384	1910394	65

NOTES:

1. CUT CATERPILLAR GROMMET (DEC 9007622) 7-1/8" LONG. ON ONE SIDE CUT TOOTH OUT 3-5/8" FROM ONE END. ON EACH END SPRAY WITH SCOTCH-GRIP ADHESIVE NO. 77 (DEC 9008907). FOLLOW DIRECTIONS FOR NON-PERMANENT BONDS ON BACK OF CAN. PLACE THE GROMMET OVER 17Z5 TRANSFORMERS WITH CUTOUT TOOTH OVER CAPACITOR C4Ø.
2. IN PLACE OF DEC 6380 (ITEM #49), DEC 380 (1909485) MAY BE USED.
3. R65 IS DETERMINED BY THE VOLTAGE AT PIN HA1 WITH RESPECT TO +5V.
4. ALLOWABLE MEMORY SYSTEM CONFIGURATIONS:

MM8-EJ

H212 OR H212A STACK
G111 OR G115 S/I
G233 OR G234 X-Y

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	R91	RES. 196, 1/4W, 1%	1302956	66
1	E1	IC DEC 7384	1910393	65
A/R		BLK & WHT #30 TWP	9107720-09	64
1	R65	SEE NOTE ABOVE		63
1	R1Ø2	RES. 10, 1/4W, 10%	1300170	62
13		SPLIT LUGS	9006735	61
1	R81	RES 2.74 1/8W 1% 100 MFP	1304868	60
A/R		SCOTCH GRIP ADHESIVE	9008907	59
A/R		CATERPILLAR GROMMET	9007622	58
REF		ASSY/DRILLING HOLE LAYOUT	E-AH-G111-0-5	57
2	R9Ø, R1Ø1	RES. 100, 1/8W, 1% 100 MFP	1302858	56
A/R		WIRE #22 AWG SOLID BUS	9107560-01	55
2		SPACER (CABLE CLAMP)	1202704	54
4		EYELET #GS4-11 E.B. STIMPSON	9006750	53
1	E6	I.C. DEC 7486	1910011	52
3	E1Ø, E17, E24	I.C. DEC 8881	1909705	51
3	E14, E21, E28	I.C. DEC 384	1909486	50
1	E2	I.C. DEC 6380	1909971	49
2	E3, E8	I.C. DEC 74H11	1909267	48
1	E9	I.C. DEC 74H00N	1909056	47
6	E11, E15, E18, E22, E25, E29	I.C. DEC 74H40N	1905586	46
1	E7	I.C. DEC 7440N	1905579	45
6	E12, E16, E19, E23, E26, E3Ø	I.C. DEC 7400N	1905575	44
1	E4	I.C. DEC 7474N	1905547	43
12	E31-E42	I.C. MC 1540G	1905521	42
1	DL1	100NS DELAY LINE	1610033-0	41
3	E13, E2Ø, E27	PULSE TRANSFORMER	1609996	40
12	T1-T12	TRANSFORMER 17Z-5	1609478	39
12	Q1-Q12	TRANSISTOR DEC 3734	1510062	38
2	Q23, Q24	TRANSISTOR DEC 3762	1509649	37
9	Q14-Q22	TRANSISTOR DEC 6534-B	1503409-01	36
1	Q13	TRANSISTOR DEC 2219-S	1501881	35
12	R1-R12	RES. 13.0K 6W, 1%	1310032-01	34
12	R49-R6Ø	RES. 68, 1/2W, 5% CC	1309405	33
1	R89	RES. 68.1K, 1/8W, 1%	1305252	32
1	R88	RES. 5.62K, 1/8W, 1%	1305128	31
				30
2	R79, R95	RES. 4.64K, 1/8W, 1%	1304856	29
1	R77	RES. 9.09K, 1/8W, 1%	1304855	28
2	R92, R85	RES. 1.96K, 1/8W, 1%	1304833	27
3	R82, R83, R96	RES. 1K, 1/8W, 1%	1303114	26
1	R78	RES. 1.21K, 1/8W, 1%	1302871	25
24	R13, R15, R16, R18, R19, R21, R22, R24, R25, R27, R28, R3Ø, R31, R33, R34, R36, R37, R39, R4Ø, R42, R43, R45, R46, R48	RES. 75 1/8W 1%	1303064	24
1	R86	RES. 680, 1/4W, 5% CC	1301424	23
6	R66, R68, R7Ø, R8Ø, R94, R99	RES. 10K, 1/4W, 5% CC	1300479	22
3	R73, R76, R97	RES. 4.7K, 1/4W, 5% CC	1300447	21
2	R61, R87	RES. 1K, 1/4W, 5% CC	1300365	20
19	R14, R17, R2Ø, R23, R26, R29, R32, R35, R38, R41, R44, R47, R62, R67, R69, R71, R84, R93, R98	RES. 330, 1/4W, 5% CC	1300295	19
1	R63	RES. 220, 1/4W, 5% CC	1300271	18
1	R1ØØ	RES. 100, 1/4W, 5% CC	1300229	17
3	R72, R74, R75	RES. 68, 1W, 10% CC	1300222	16
1	S1	ROTARY SWITCH	1210043-0	15
2		HANDLE FLIP CHIP - GREEN	9008337-01	14
1	D49	DIODE .4M 6.8AZ1	1109991-1	13
36	D1-D24, D37-D48	DIODE D672	1105275	12
12	D25-D36	DIODE D664	1100114	11
32	C25-C43, C47, C52, C57, C62-C64, C91-C93, C98, C1Ø1, C1Ø2, C11Ø	CAP. .047 UF 16V 20% DISC	1009678	10
33	C65-C9Ø, C94, C96, C99, C105, C1Ø6, C1Ø8, C1Ø9	CAP. .01 UF 100V 20% DISC	1001610	9
6	C44-C46, C111-C113	CAP. 47 UF 20V 20% S. TANT	1000079	8
7	C95, C97, C1ØØ, C103, C1Ø4, C1Ø7, C114	CAP. 6.8 UF 35V 20% S. TANT	1000067	7
12	C48-C51, C53-C56, C58-C61	CAP. 1500 PF 200V 10% DISC	1000054	6
12	C13-C24	CAP. 1000PF 100V 5% MICA	1000042	5
12	C1-C12	CAP. 82 PF 100V 5% D. MICA	1000015	4
1		ETCHED CIRCUIT BOARD	5009844	3
REF		MODULE ECO HISTORY	B-MH-G111-Ø6	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-G111-Ø-4	1

PARTS LIST

REV COLUMN: C

PRINTED CIRCUIT BOARD REVISION

CIRCUIT SCH. REVISION

DEC NO.	EIA NO.
DEC 3734	SAME
DEC 3762	SAME
DEC 6534-B	MPS6534
DEC 2219-S	2N 2219
.4 M 6.8AZ1	IN4099
D672	IN3653
D664	IN3606

SEMICONDUCTOR CONVERSION CHART

IC TYPE	GND	+5V
DEC 380	1	8
DEC 384	1	8

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

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT
55	22	J6-A	J6-B
↕	↕	J5-A	J5-B
↕	↕	J4-A	J4-B
↕	↕	J3-A	J3-B
↕	↕	J2-A	J2-B
55	22	J1-A	J1-B

JUMPER LIST

REVISIONS: G111-00001 ORIGINATED

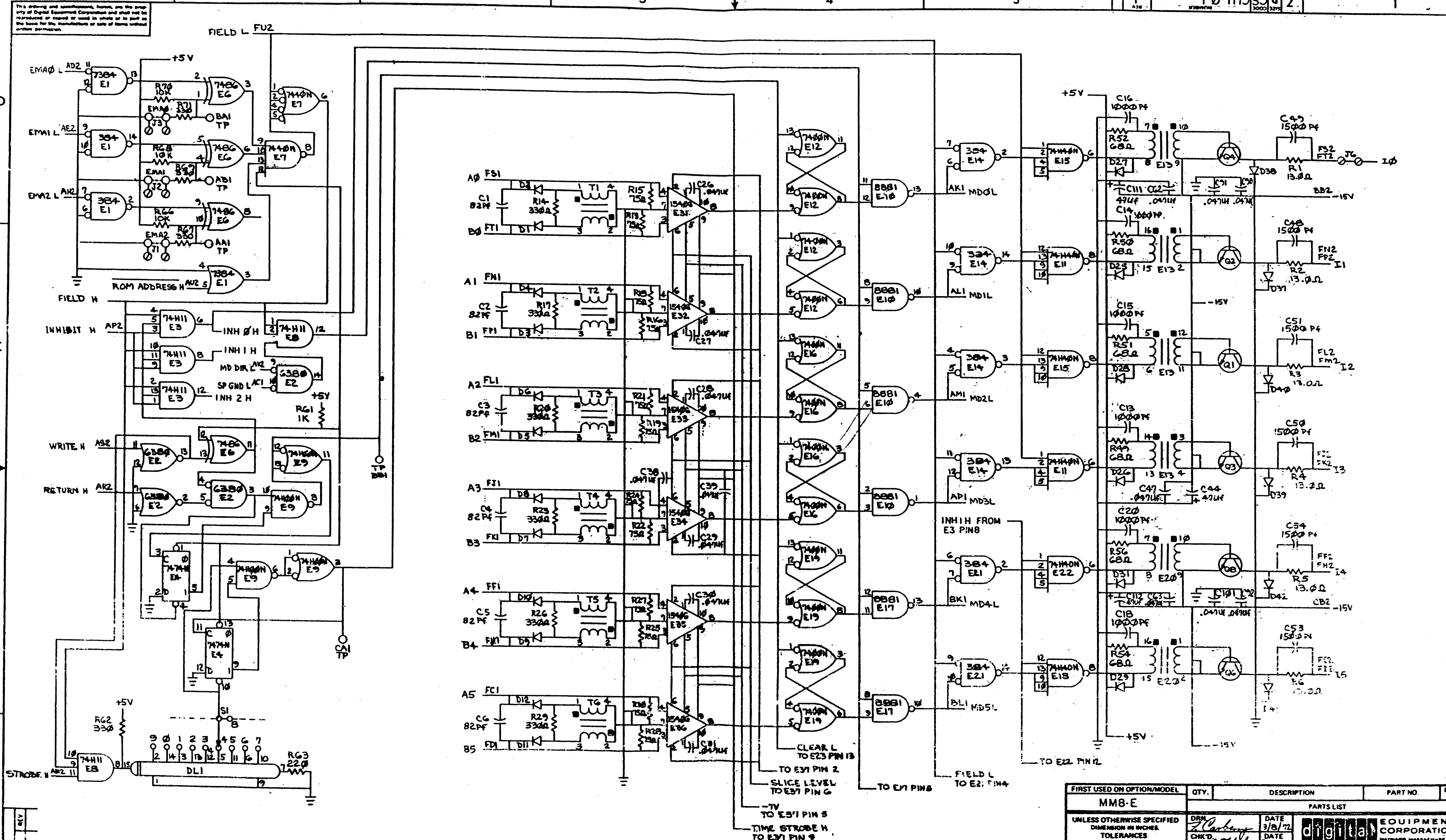
FIRST USED ON: MMB-EJ

SCALE 2/1 SHEET 1 OF 3

EQUIPMENT CORPORATION

TITLE: SENSE INHIBIT

SIZE: E CODE: CS NUMBER: G111-Ø-1 REV. J



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM8-E				

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

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

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

		DATE
DRN.		3/8/72
CHK'D.		3-23-72
ENG.	W. Coates	
PROJ. ENG.	W. Coates	
PROD.		

NEXT HIGHER ASSY. A-PL-MM8-E-0

SCALE —

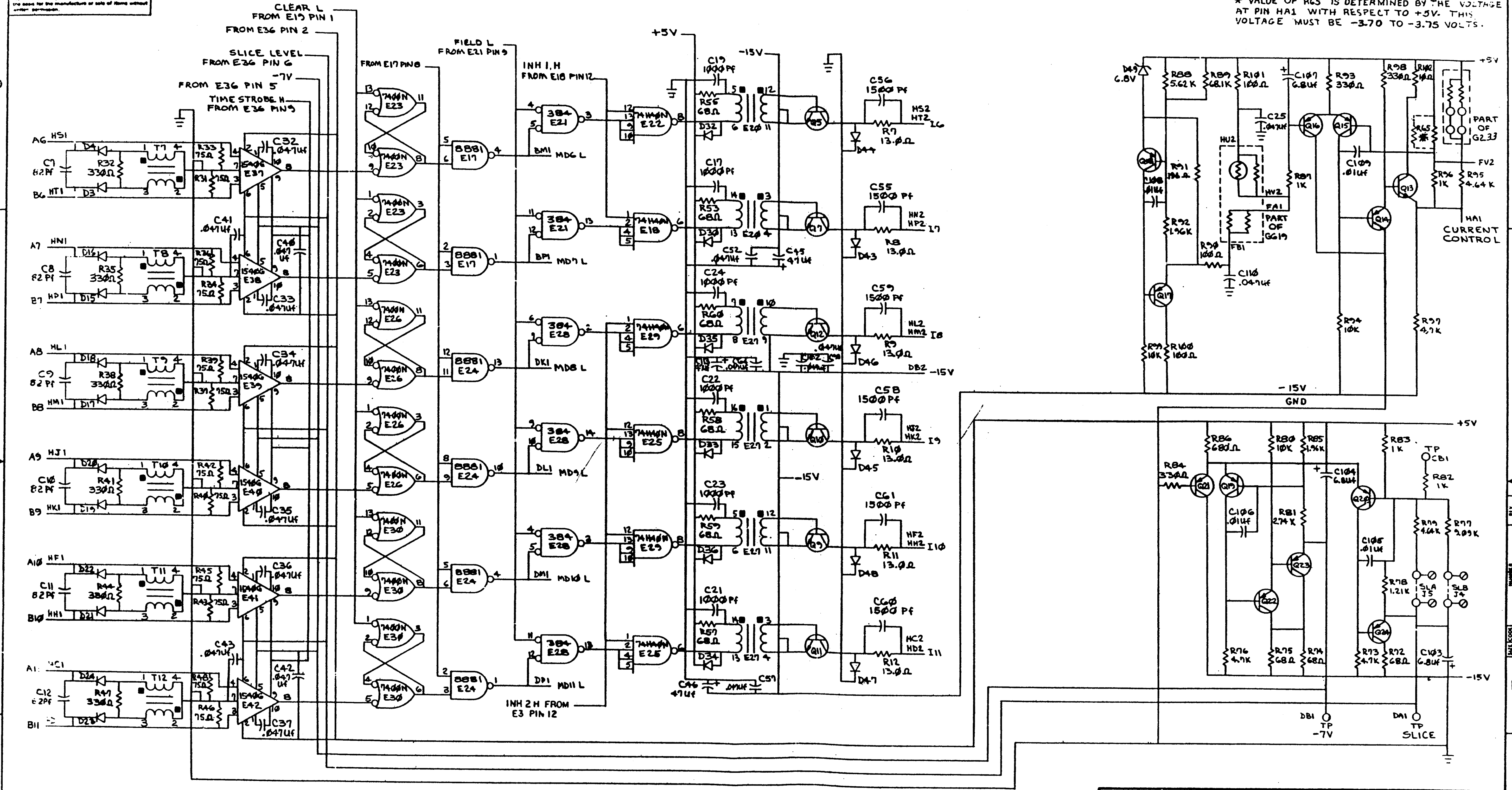
SHEET 2 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE 4K OR 8K SENSE INHIBIT BOARD

SIZE	CODE	NUMBER	REV
D	CS	G111-0-1	J

* VALUE OF R65 IS DETERMINED BY THE VOLTAGE AT PIN HA1 WITH RESPECT TO +5V. THIS VOLTAGE MUST BE -3.70 TO -3.75 VOLTS.



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

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

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

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

		DATE
DRN.	F. Carberry	3/10/72
CHK'D.		3-27-72
ENG.		3/27/72
PROJ. ENG.	W. Conte	
PROD.	R. K.	3-31-72

NEXT HIGHER ASSY.

SCALE

SHEET 3 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
4K OR 8K SENSE INHIBIT BOARD

SIZE	CODE	NUMBER	REV
D	CS	G111-0-1	J

DIST.

DEC FORM NO DRD 105-3

D CS G111-0-1 J