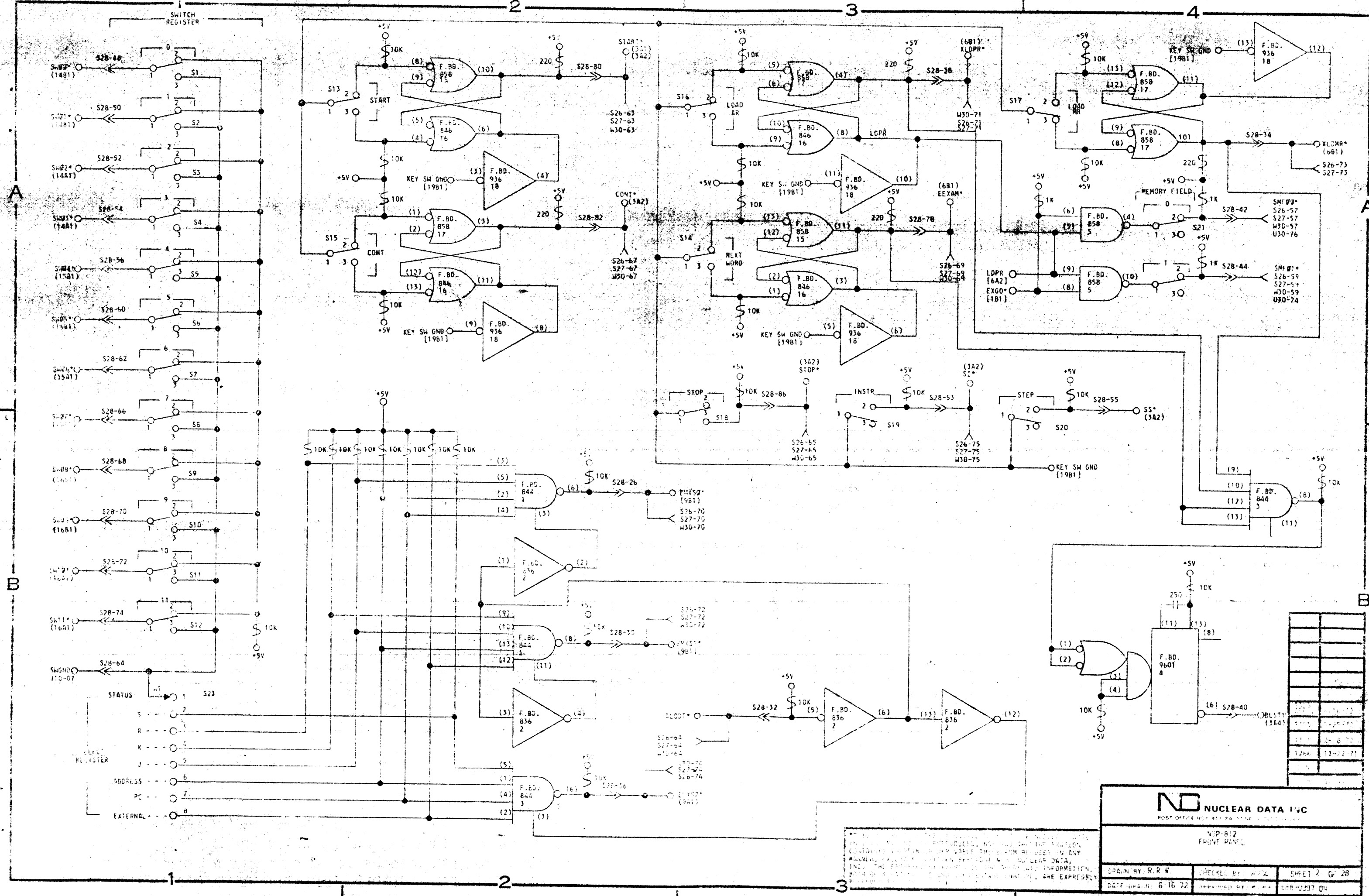


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 POST OFFICE BOX 203 FAIR HAVEN, CONNECTICUT

MDP-812
 FRONT PANEL

DRAWN BY: R. D. W.	CHECKED BY:	SHEET 1 OF 28
DATE DRAWN: 5-15-72	APPROVED BY:	L98-0397-04



ND NUCLEAR DATA INC
POST OFFICE BOX 811 PA. 19104

VIP-812
FRONT PANEL

DRAWN BY: R.R.W.	CHECKED BY: H.F.Z.	SHEET 2 OF 28
DATE DRAWN: 6-16-72	REVISIONS: []	APP'D: []

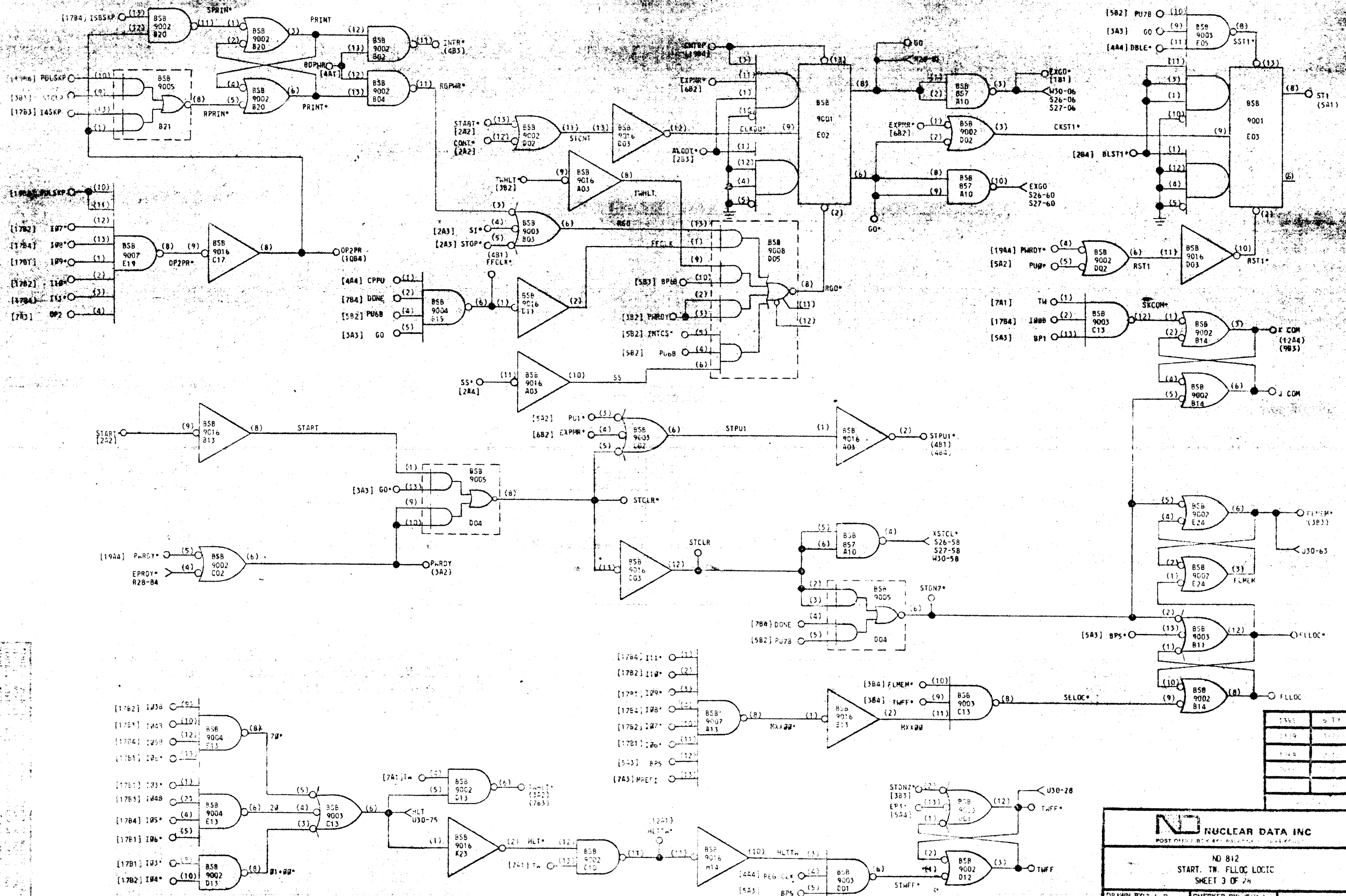
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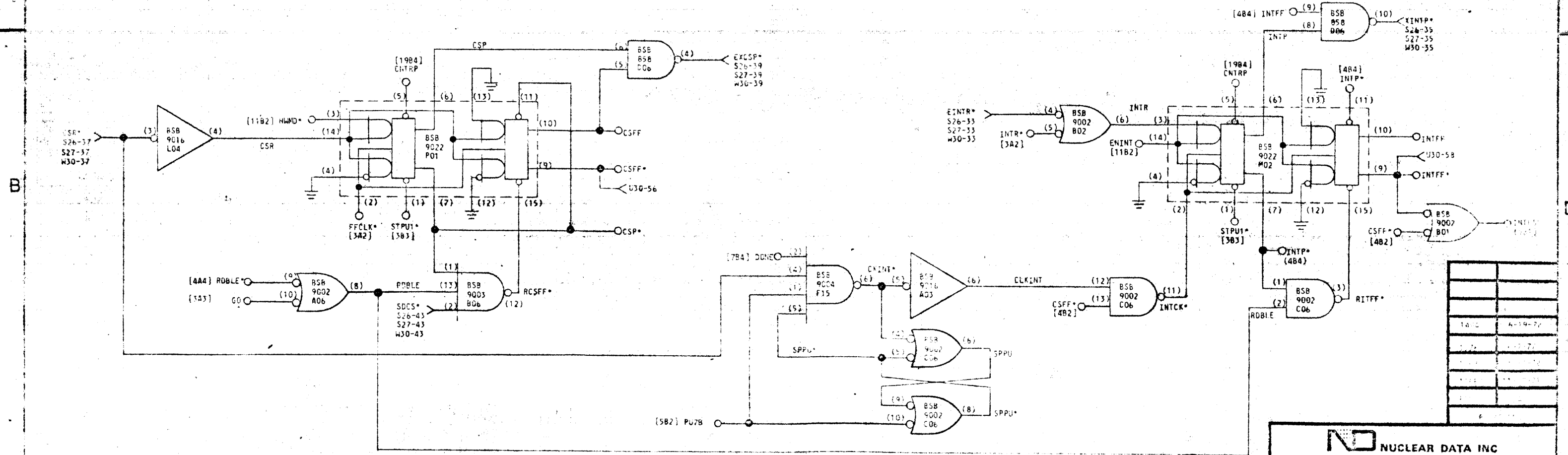
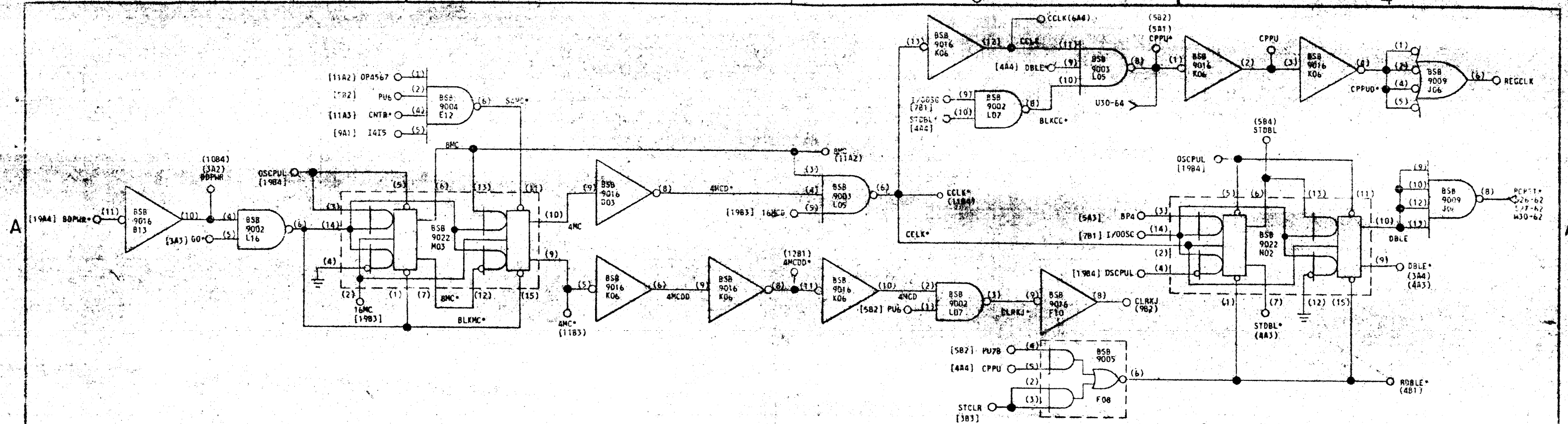
1385	6-17-72
1389	6-17-72
1394	6-17-72
1395	6-17-72

NO NUCLEAR DATA INC
POST OFFICE BOX 471, PALM BEACH, FLORIDA 33402

NO 812
START. TW. FLLOC LOGIC
SHEET 3 OF 24

DRAWN BY: J. D. [] CHECKED BY: J. W. []
DATE DRAWN: 10-10-71 APPROVED BY: K. L. []

LBB-0397-04

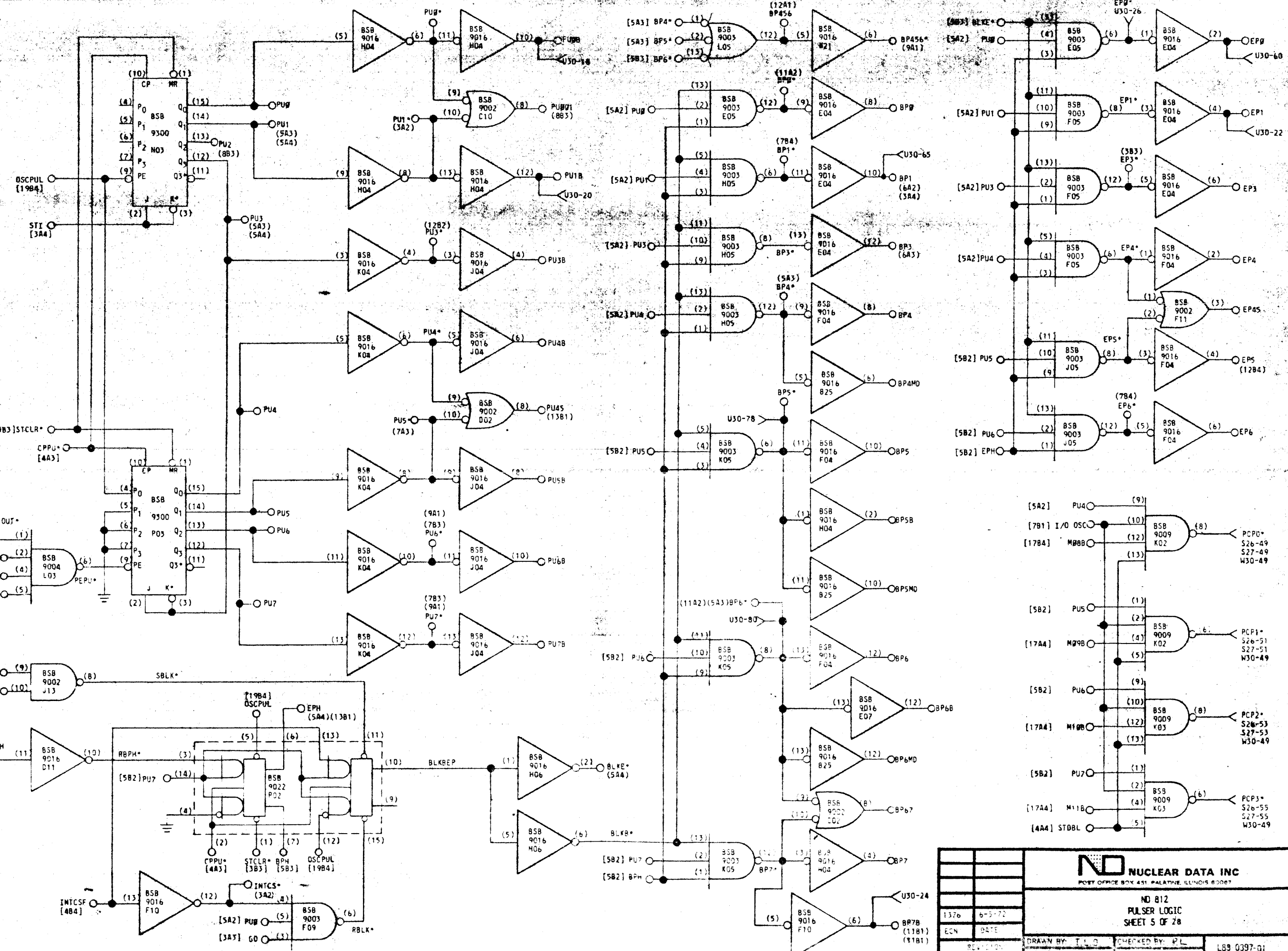


NUCLEAR DATA INC
 POST OFFICE BOX 401, PALM SPRING, ILLINOIS 60077

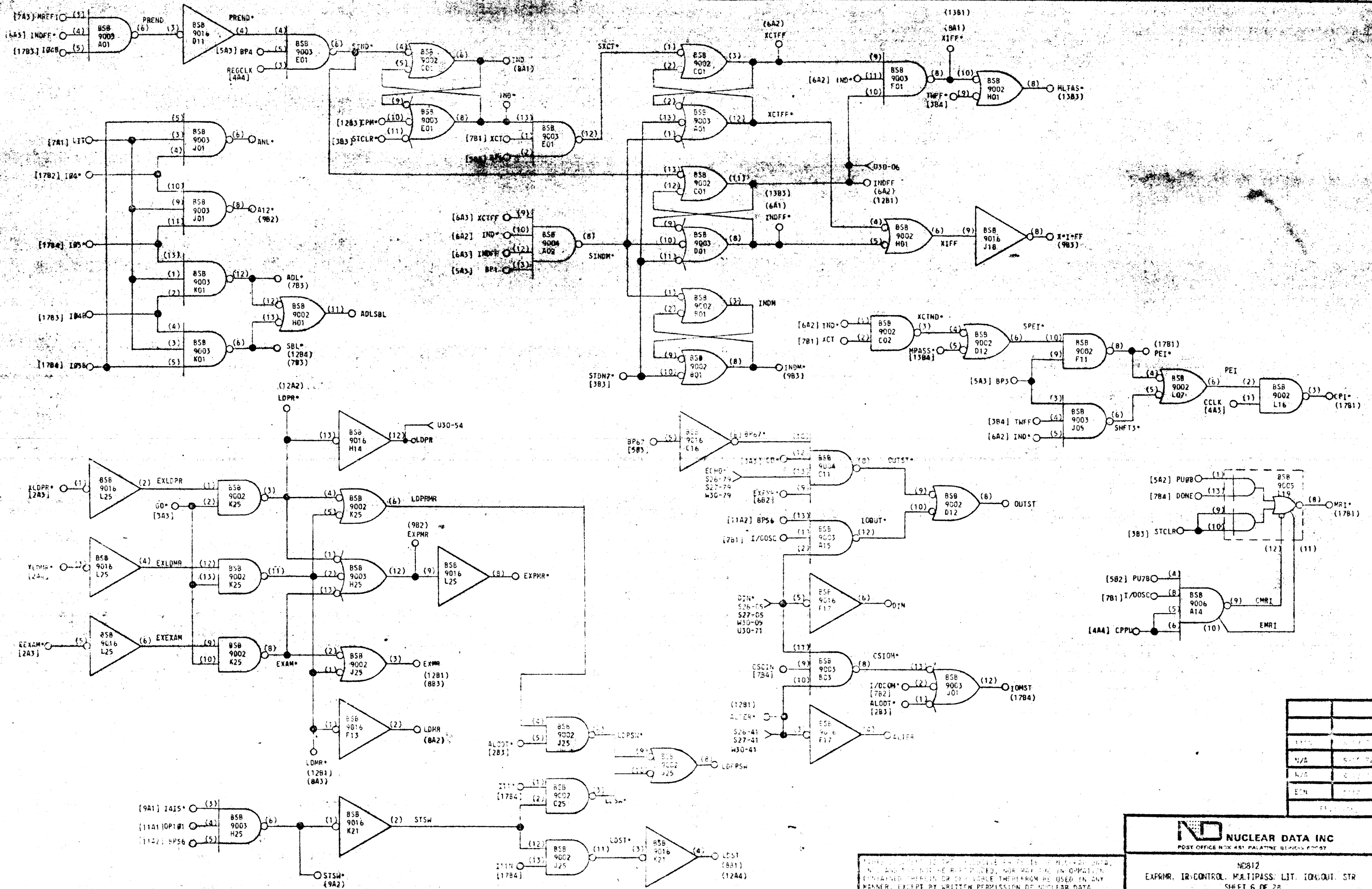
NO 812
 REG CLK, INT, DMA, CPU
 SHEET 4 OF 21
 DRAWN BY: J.L.D. CHECKED BY: J.P.
 DATE DRAWN: 10-10-64 APPROVED BY: J.L.D. L88 0107-04

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 NUCLEAR DATA INC. POST OFFICE BOX 451 PALATINE, ILLINOIS 60067		ND 812 PULSER LOGIC SHEET 5 OF 28	
		1376 6-5-72 ECN DATE	DRAWN BY: T.L.D. DATE DRAWN: 10-10-72



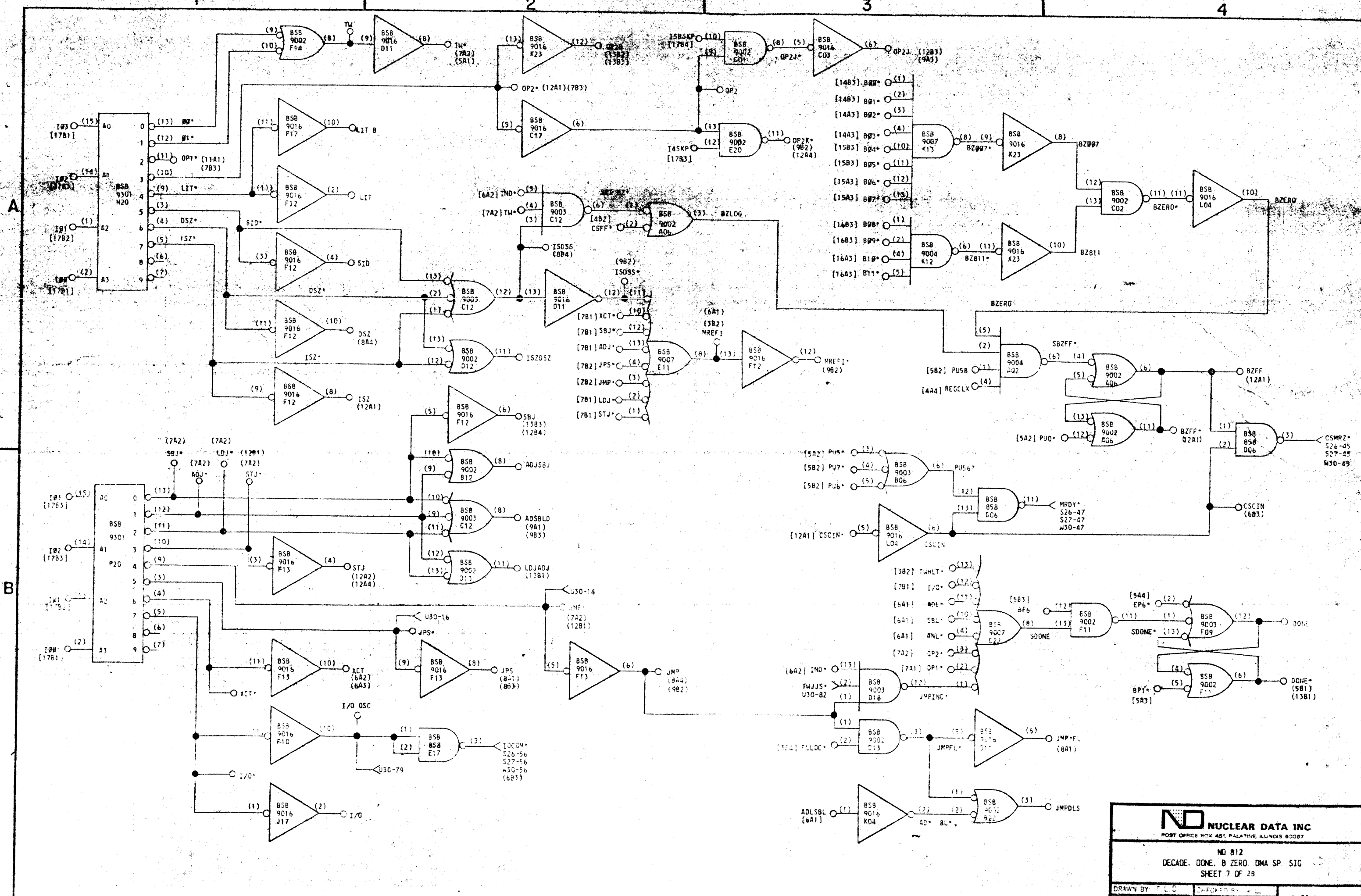
ND NUCLEAR DATA INC
POST OFFICE BOX 451 PALATKA ILLINOIS 60457

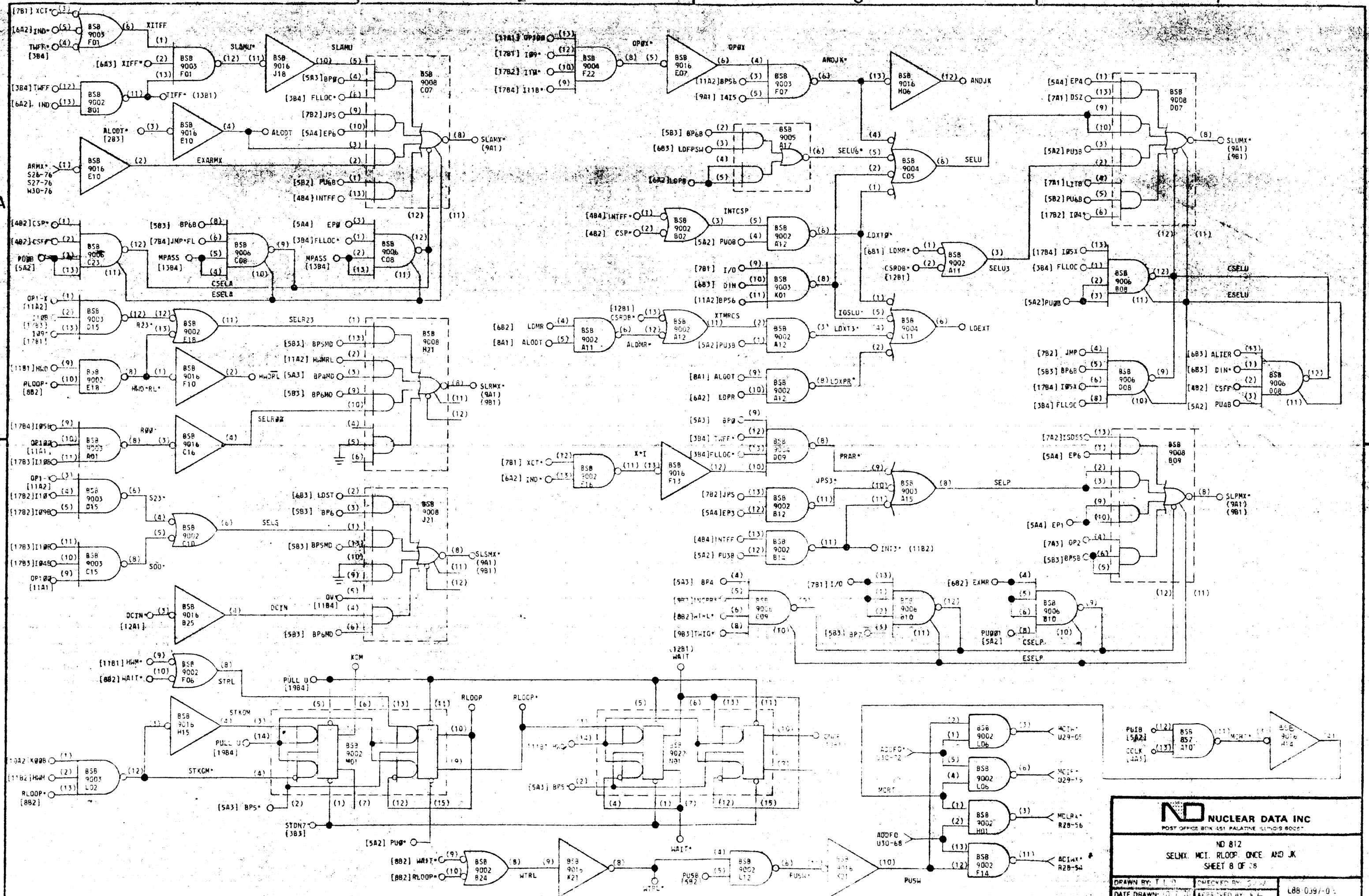
NDB12
EXPMR, IR-CONTROL, M.A.I.PASS, LIT, IO:OUT, STR
SHEET 6 OF 28

DRAWN BY: T.E.D.	CHECKED BY: J.L.
DATE DRAWN: 11/17/77	REVISED BY: J.G.

L88 0397-01

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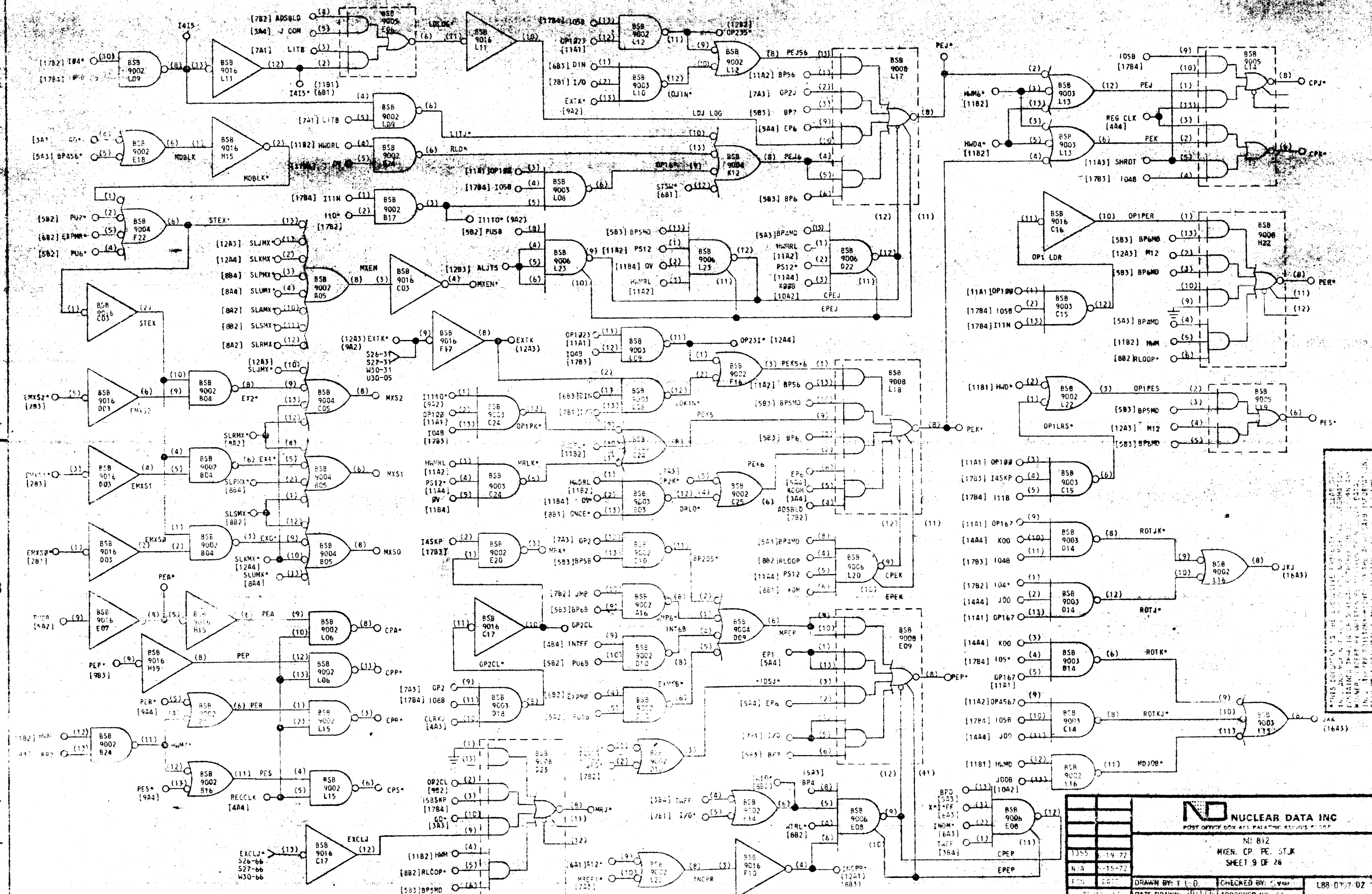
NUCLEAR DATA INC
 POST OFFICE BOX 451 PALATINE ILLINOIS 60067

ND 812
 SELNX, MCI, LOOP, ONCE, AND JK
 SHEET 8 OF 28

DRAWN BY: T. L. D. CHECKED BY: G. J. W.
 DATE DRAWN: 10/7/72 APPROVED BY: K. L.

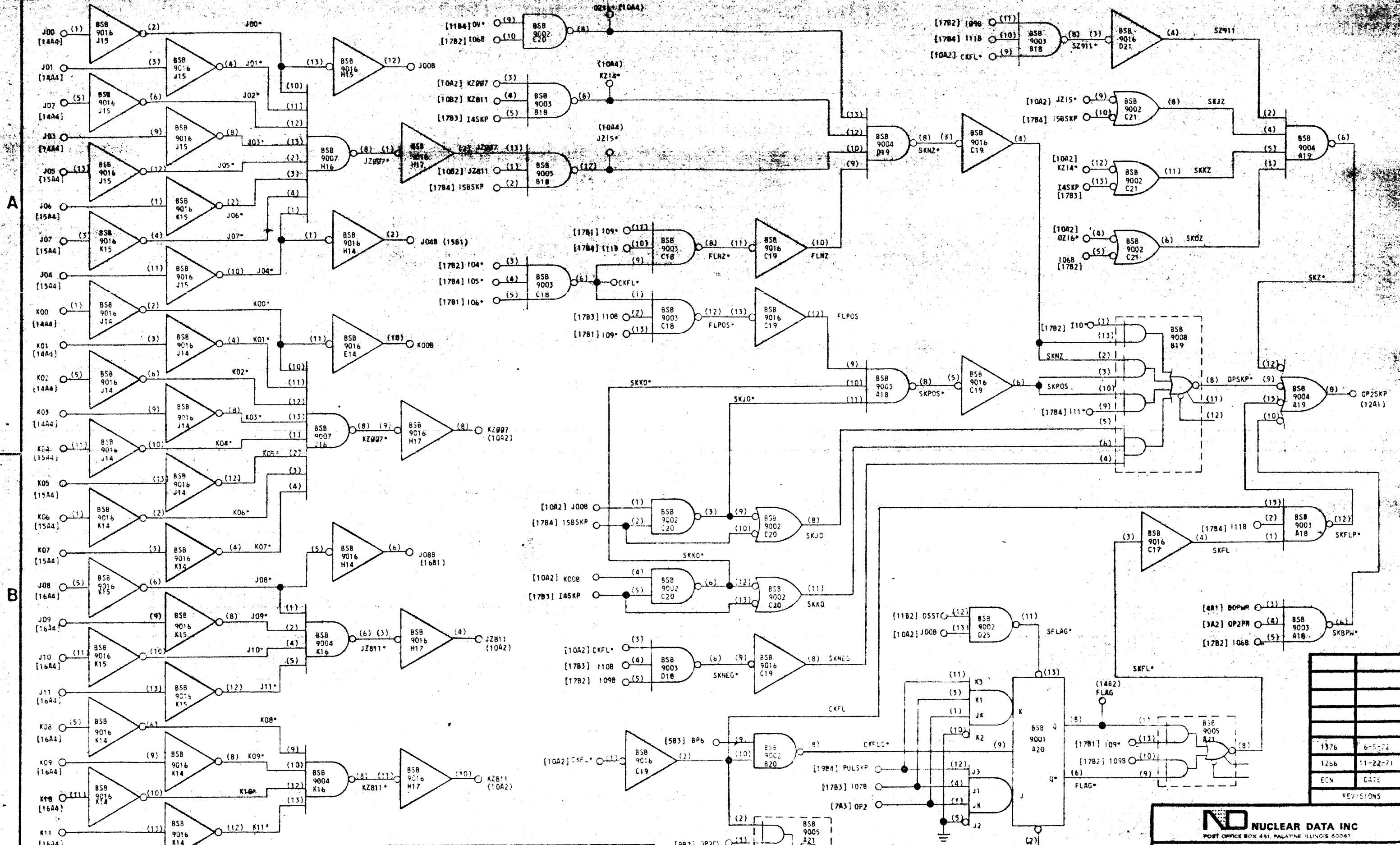
L88-039-01

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NUCLEAR DATA INC	
POST OFFICE BOX 411 PALM SPRING, CALIF. 92262	
NO 812	
MKEN, CP, PE, STJK	
SHEET 9 OF 28	
DATE	1355-19-72
REV	N/A -15-72
DRAWN BY	T.L.D.
CHECKED BY	[Signature]
DATE DRAWN	10/17/70
APPROVED BY	[Signature]
REF	188-017-02



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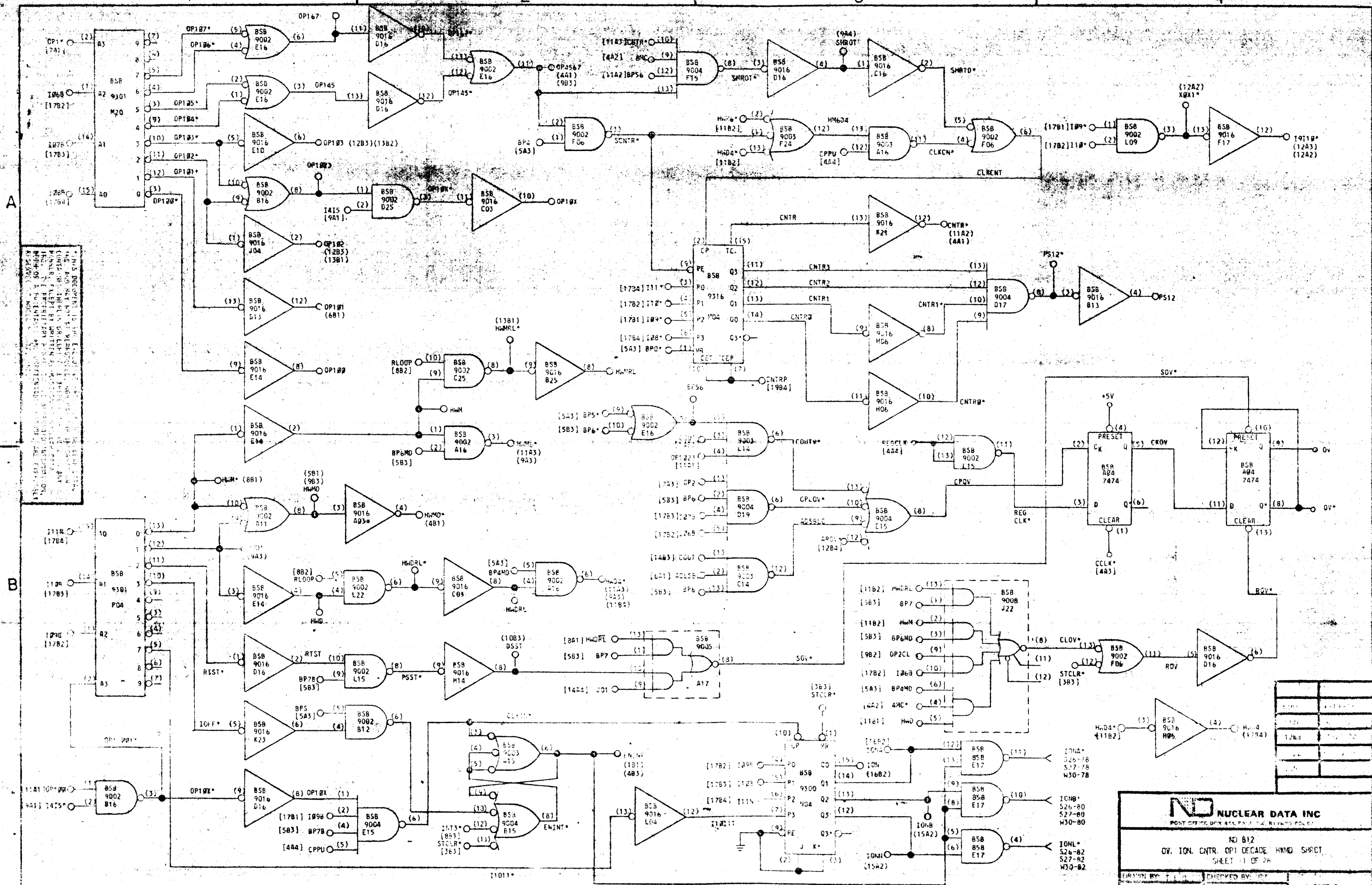
REVISIONS	
NO.	DATE
1376	6-5-74
1266	11-22-71
ECN	DATE

NUCLEAR DATA INC.
 POST OFFICE BOX 451, PALATKA, ILLINOIS 60467

N0812
JKZERO, FLAG, OPZSKP
 SHEET 10 OF 28

DRAWN BY: T.L.G. CHECKED BY: R.L.
 DATE DRAWN: 10/2/73 APPROVED BY: G.

L 88-03-102

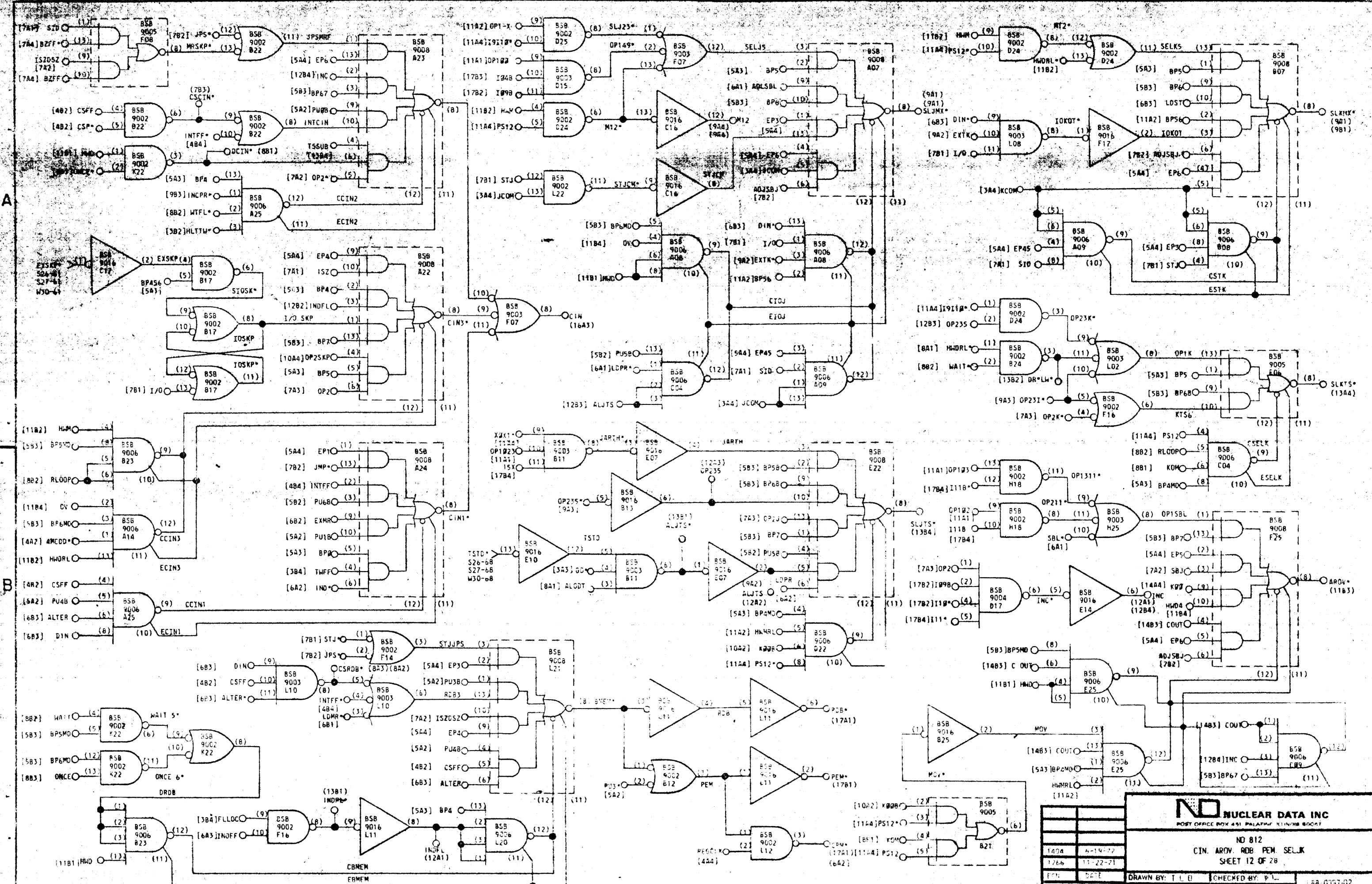


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 DATE 08-14-2011 BY 60322 UCBAW/STP/STP
 REASON: EXECUTIVE ORDER 13526, SECTION 1.4

NUCLEAR DATA INC
 POST OFFICE BOX 454, FAIRBANKS, ALASKA 99701

NO 812
 OV, ION, CNTR, OPI DECADE, HMMD, SHROT
 SHEET 11 OF 24

DATE DRAWN: 10/2/70 APPROVED BY: J.C. L88-0397-D4



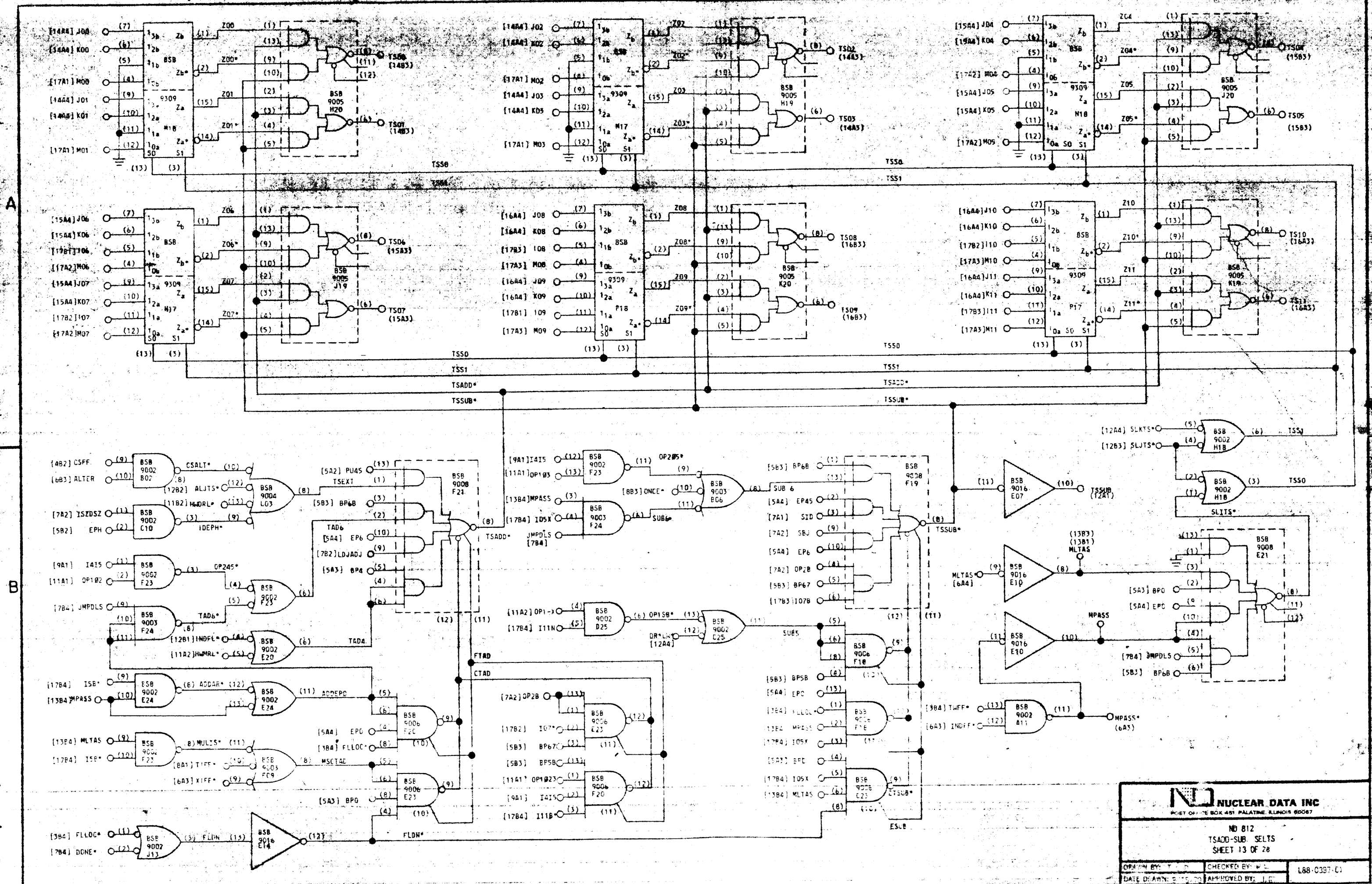
NUCLEAR DATA INC
 POST OFFICE BOX 451 PALMATE BEACH FLORIDA 32909

NO 812
 CIN. AROV. ROE. PEM. SELJK
 SHEET 12 OF 28

REV. DATE DRAWN BY: T. L. O. CHECKED BY: P. L. APPROVED BY: J. G.

NO 812
 A-14-72
 11-22-71
 10-10-70

98-0197-02



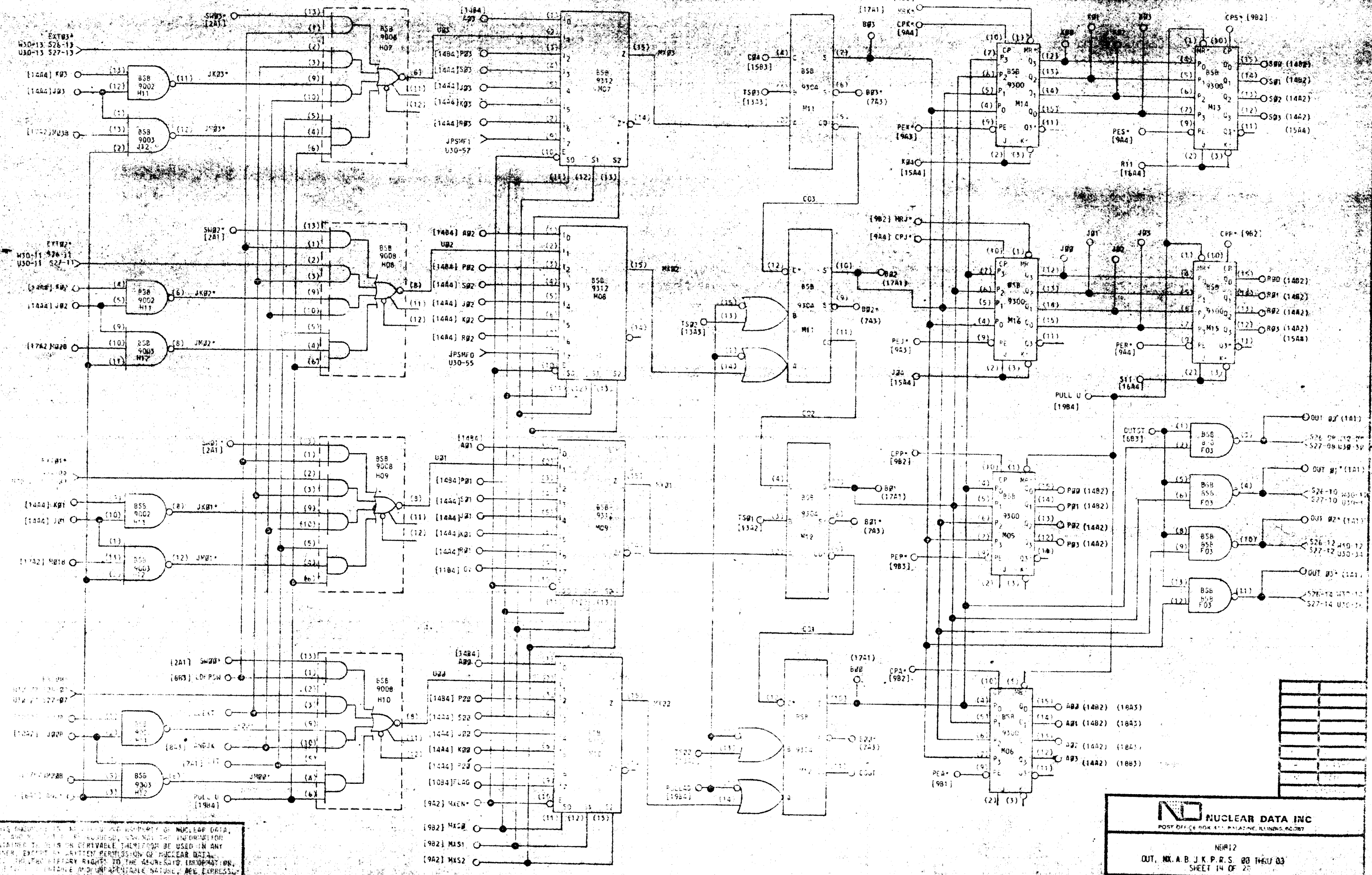
ND NUCLEAR DATA INC
 POST OFFICE BOX 451 PALATKA ILLINOIS 60067

ND 812
 TSADD-SUB SELTS
 SHEET 13 OF 28

OPERATION BY: _____	CHECKED BY: _____
DATE DRAWN: 5-15-70	APPROVED BY: _____

L88-0397-C1

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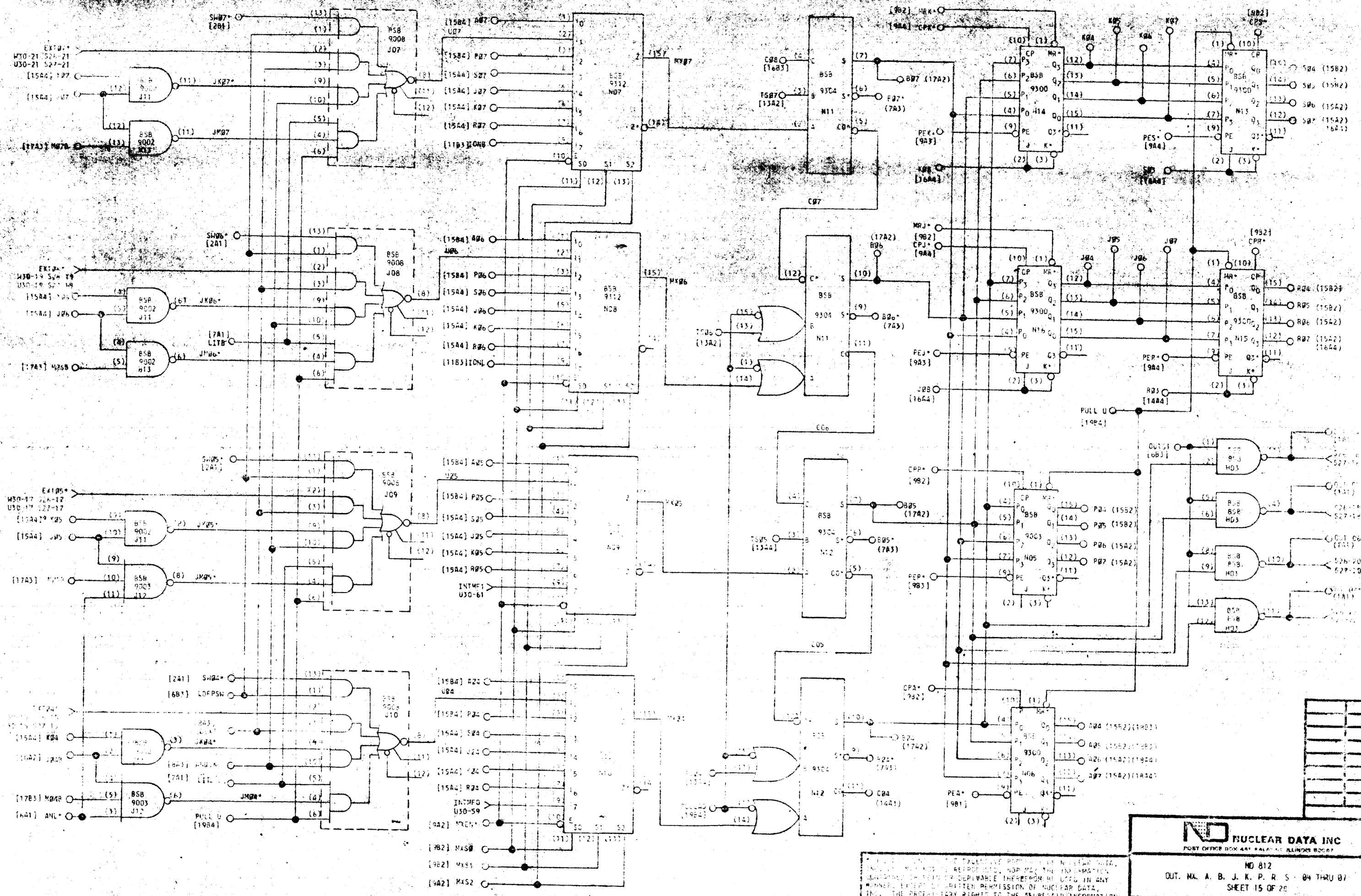
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NDR12
 OUT. MX. A. B. J. K. P. R. S. 00 146U 03
 SHEET 14 OF 20

DRAWN BY: T.L.D. CHECKED BY: []
 DATE DRAWN: 6-15-70 APPROVED BY: []

68-0397-02



NUCLEAR DATA INC
 POST OFFICE BOX 441 BALTIMORE, MARYLAND 21207

NO 812
 OUT. MK. A. B. J. K. P. R. S - 04 THRU 07
 SHEET 15 OF 20

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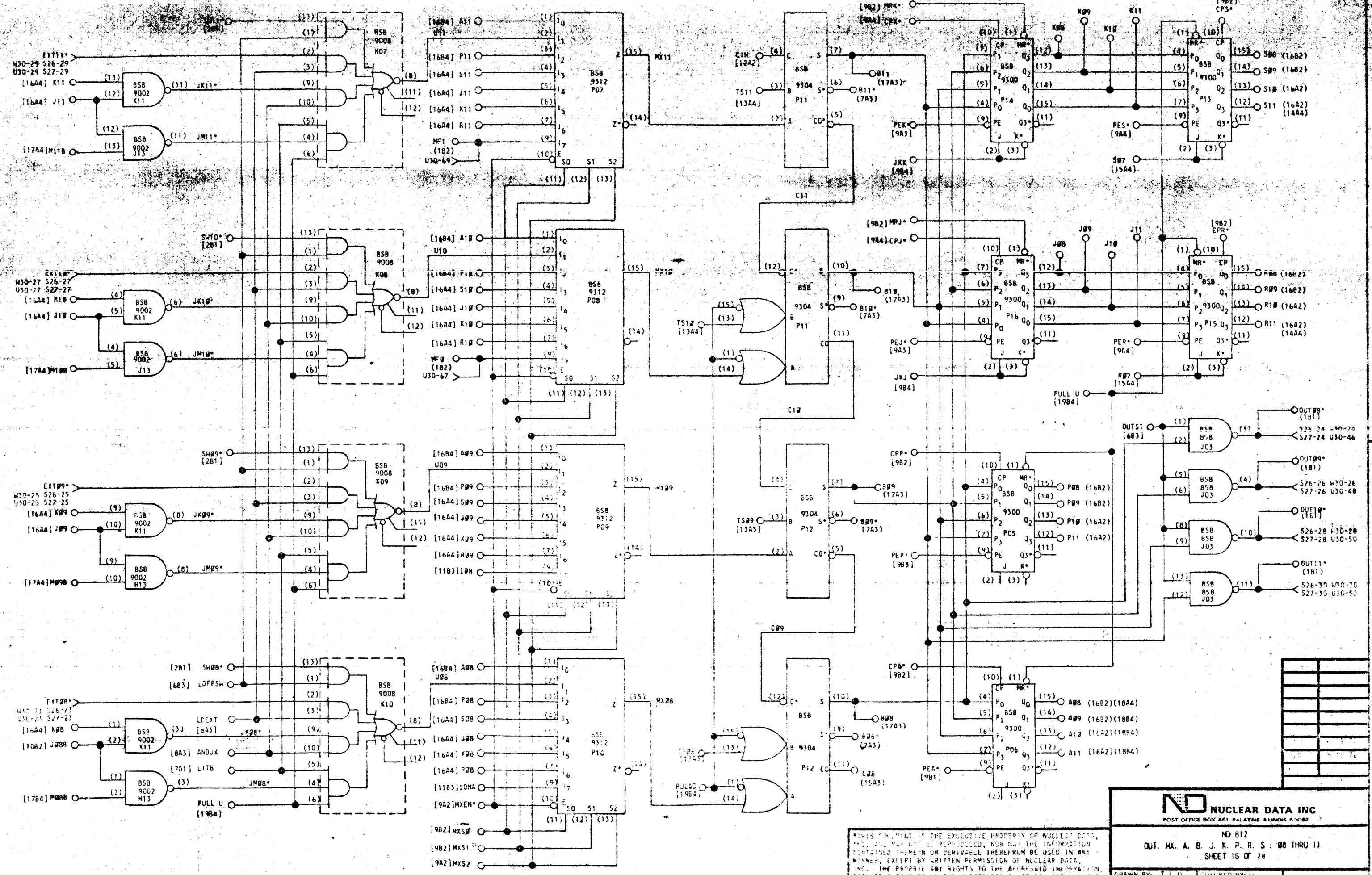
DATE DRAWN: 6/15/67 APPROVED BY: [Signature]

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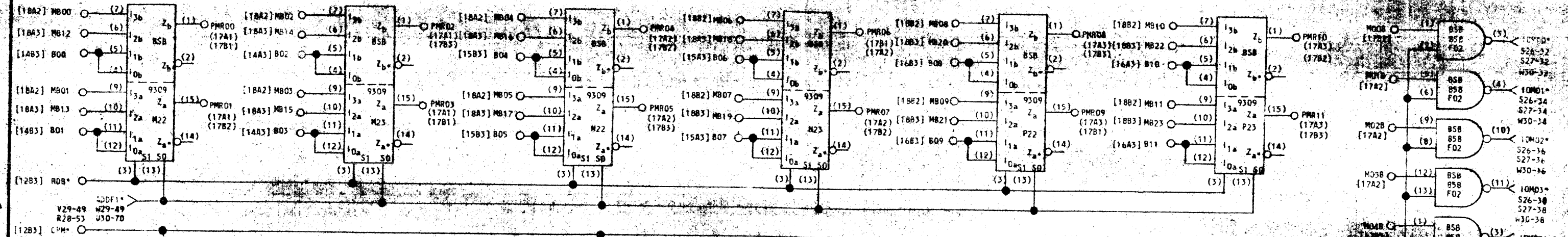
ND 812
 OUT. MX. A. B. J. K. P. R. S. : 88 THRU 11.
 SHEET 15 OF 28

DRAWN BY: T.L.B. CHECKED BY: P.
 DATE DRAWN: 9/15/70 APPROVED BY: J.G.
 L88-0337-02

FIG. 15

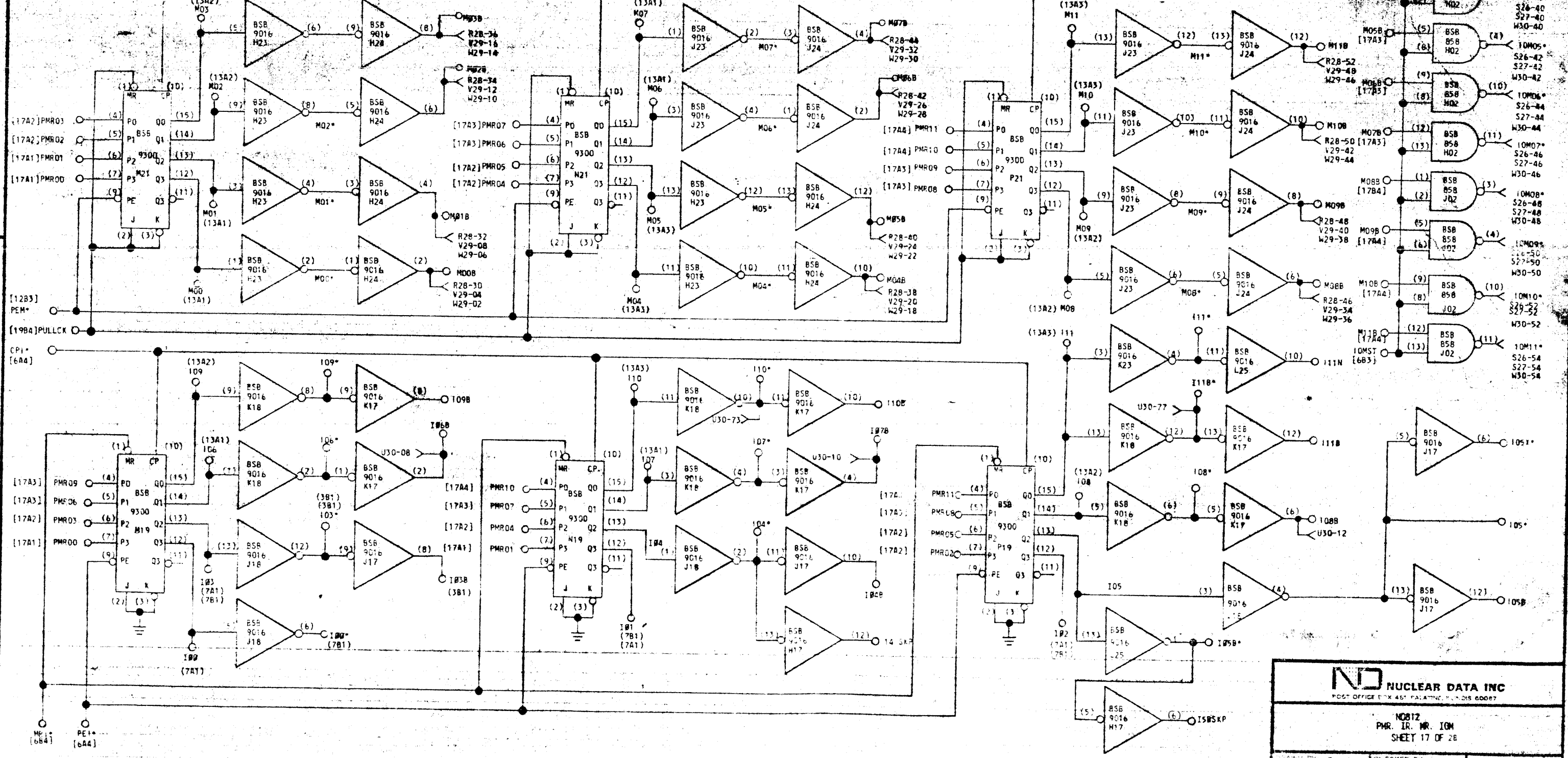
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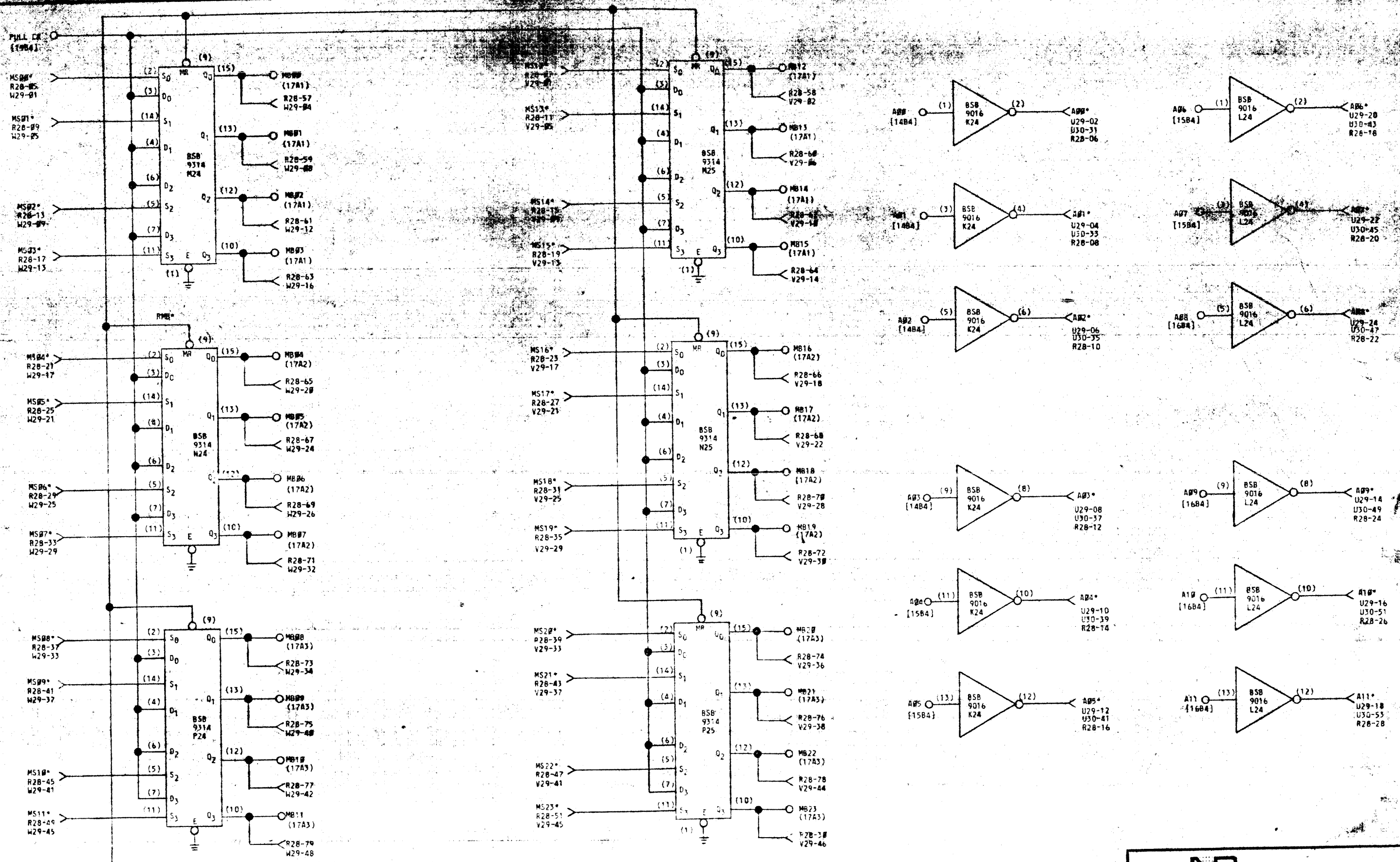
ND NUCLEAR DATA INC
 POST OFFICE BOX 451 PALM SPRING, CALIF. 92562

NOB12
 PHR. IR. MR. IGM
 SHEET 17 OF 28

DESIGNED BY: [] CHECKED BY: []
 DATE DRAWN: [] APPROVED BY: []

L86-0397-00

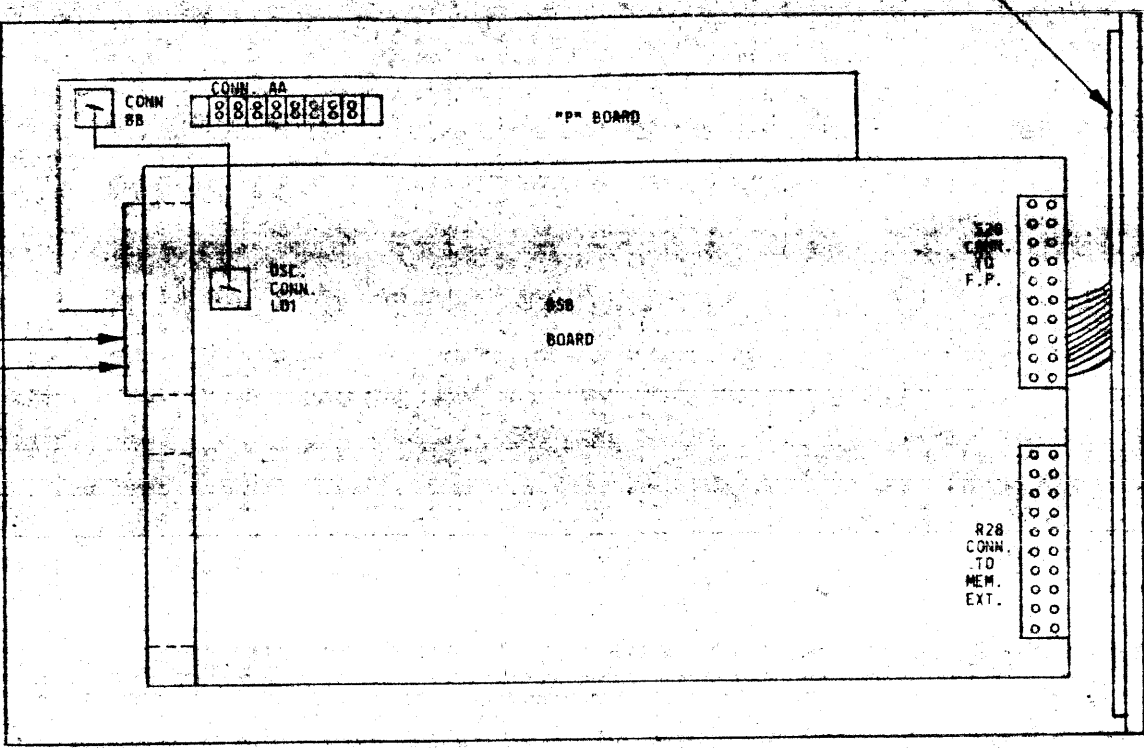
PENDING ECA



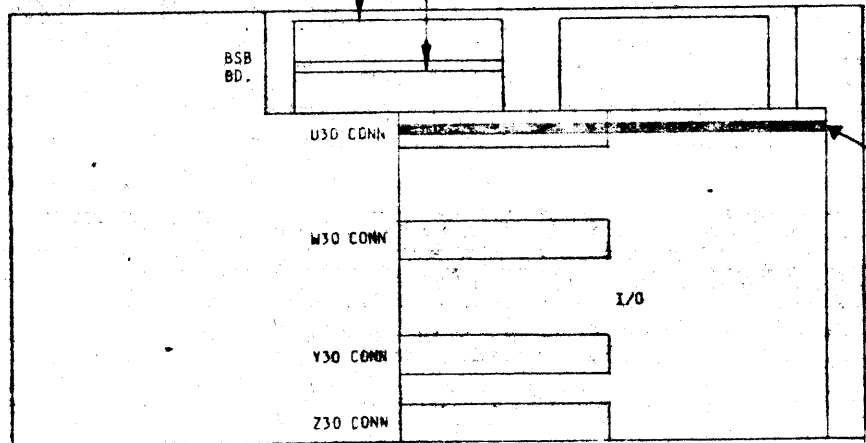
ND NUCLEAR DATA INC
PCS OFFICE BOX 451 PALATINE ILLINOIS 60067

ND812
 MB00-MB23 AND AB0-A11*
 SHEET 18 OF 28

DRAWN BY: TLD	CHECKED BY: RL
DATE: 9-10-70	JOB: 0397-00

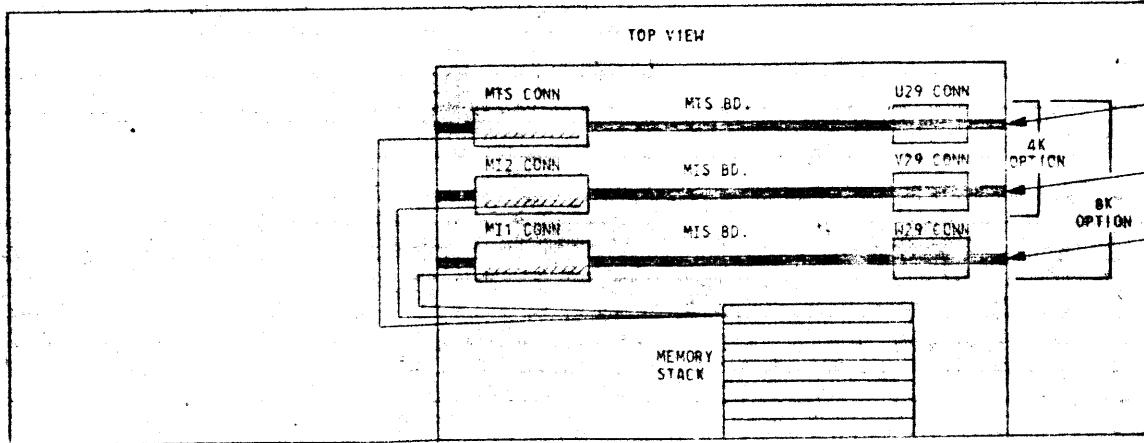


TOP VIEW



REAR VIEW

MFC BOARD
8K OPTION
OR
TCC BOARD
4K OPTION



LEFT SIDE VIEW

INSTALLED FOR 4K & 8K MEMORY OPTIONS

INSTALLED FOR 8K MEMORY OPTION ONLY

INSTALLED FOR 4K & 8K MEMORY OPTIONS

ND NUCLEAR DATA INC
POST OFFICE BOX 451 PALATINE, ILLINOIS 60067

NO812
CONNECTOR LOCATIONS
SHEET 20 OF 28

DRAWN BY: JLD	CHECKED BY: RL	
DATE DESIGNED: 6/68	APPROVED BY: JLD	LR-0397-01

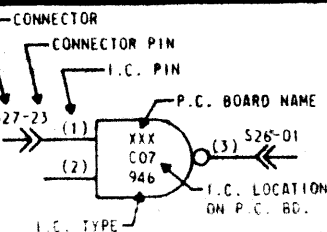
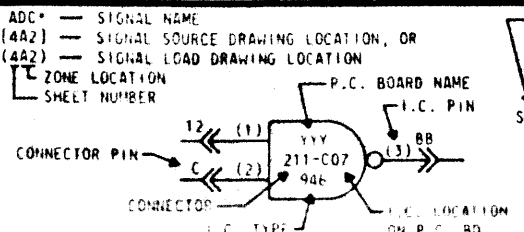
PENDING ECN

MEMORY EXTENSION R28				MULTI FIELD CONTROL U30				MEMORY MTS U29				MEMORY M15 (2ND 4K) V29				MEMORY M15 (1ST 4K) M29			
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL		
1	XGND1 TO M22-08	2	XGND1 TO M22-08	1	GND01 TO S26-01	2	GND02 TO S26-02	1	YM*	2	ADD*	1	MS12*	2	MS09*	1	MS08*		
3		4		3	PSV03 TO S26-03	4	PSV04 TO S26-04	3	TH*	4	AD1*	3		4	MS07*	3	MS06*		
5	MS00* [18A1]	6	ADD* [18A4]	5	EXTK* (9A2)	6	INDFF* (6A3)	5	MC1W* [884]	6	AD2*	5	MS13*	6	MS10*	5	MS05*		
7	MS12* [18A2]	8	AD1* [18A4]	7	EXT00* (14B1)	8	106B [17B2]	7	WGATEZ	8	AD3*	7		8	MS04*	7	MS03*		
9	MS01* [18A1]	10	AD2* [18A4]	9	EXT01* (14B1)	10	107B [17B3]	9	INHIB	10	AD4*	9	MS14*	10	MS11*	9	MS02*		
11	MS13* [18A2]	12	AD3* [18A4]	11	EXT02* (14A1)	12	108B [17B4]	11	INHIB*	12	AD5*	11		12	MS01*	11	MS01*		
13	MS02* [18A1]	14	AD4* [18A4]	13	EXT03* (14A1)	14	JMP* [7B2]	13	WID	14	AD6*	13	MS15*	14	MS12*	13	MS00*		
15	MS14* [18A2]	16	AD5* [18A4]	15	EXT04* (15B1)	16	JPS* [7B2]	15	MC1R* [884]	16	AD10*	15		16	MS09*	15	MS08*		
17	MS03* [18A1]	18	AD6* [18A4]	17	EXT05* (15B1)	18	PURB [5A2]	17	STROBE	18	AD11*	17	MS16*	18	MS13*	17	MS07*		
19	MS15* [18A2]	20	AD7* [18A4]	19	EXT06* (15A1)	20	PUTB [5A2]	19	R/R	20	AD6*	19		20	MS06*	19	MS05*		
21	MS04* [18A1]	22	AD8* [18A4]	21	EXT07* (15A1)	22	EPI [5A4]	21	RGATE1	22	AD7*	21	MS17*	22	MS14*	21	MS04*		
23	MS16* [18A2]	24	AD9* [18A4]	23	EXT08* (16B1)	24	BP7B [5B4]	23	WRITE	24	AD8*	23		24	MS05*	23	MS04*		
25	MS05* [18A1]	26	AD9*	25	EXT09* (16B1)	26	EPB* [5A4]	25	READ*	26		25	MS18*	26	MS15*	25	MS06*		
27	MS17* [18A2]	28	AD11* [18A4]	27	EXT10* (16A1)	28	THFF* [3B4]	27		28		27		28	MS08*	27	MS07*		
29	MS06* [18B1]	30	AD00B [17B2]	29	EXT11* (16A1)	30	OUT00* [13B4]	29		30		29	MS19*	30	MS16*	29	MS07*		
31	MS18* [18B2]	32	AD01B [17A2]	31	AD0*	32	OUT01* [13B4]	31		32		31		32	MS09*	31	MS06*		
33	MS07* [18B1]	34	AD02B [17A2]	33	AD1*	34	OUT02* [13B4]	33		34		33	MS20*	34	MS17*	33	MS08*		
35	MS19* [18B2]	36	AD03B [17A2]	35	AD2*	36	OUT03* [13B4]	35		36		35		36	MS18*	35	MS09*		
37	MS08* [18B1]	38	AD04B [17B3]	37	AD3*	38	OUT04* [13B4]	37		38		37	MS21*	38	MS19*	37	MS09*		
39	MS20* [18B2]	40	AD05B [17A3]	39	AD4*	40	OUT05* [13B4]	39		40		39		40	MS20*	39	MS08*		
41	MS09* [18B1]	42	AD06B [17A3]	41	AD5*	42	OUT06* [13B4]	41		42		41	MS22*	42	MS20*	41	MS10*		
43	MS21* [18B2]	44	AD07B [17A3]	43	AD6*	44	OUT07* [13B4]	43		44		43		44	MS21*	43	MS10*		
45	MS10* [18B1]	46	AD08B [17B4]	45	AD7*	46	OUT08* [13B4]	45		46		45	MS23*	46	MS21*	45	MS11*		
47	MS22* [18B2]	48	AD09B [17A4]	47	AD8*	48	OUT09* [13B4]	47		48		47		48	MS22*	47	MS11*		
49	MS11* [18B1]	50	M10B [17A4]	49	AD9*	50	OUT10* [13B4]	49		50		49	ADDF1*	50	MS23*	49	ADDF1*		
51	MS23* [18B2]	52	M11B [17A4]	51	AD0*	52	OUT11* [13B4]	51		52		51	ADDF1	52	MS24*	51	ADDF1		
53	ADDF1* [17A1]	54	AC1W* [8B4]	53	AD1*	54	LDPR [6A2]	53		54		53	INHIB	54	MS25*	53	INHIB		
55	ADDF1	56	MCLR* [8B4]	55	JPSM0 [14A2]	56	CSFF* [4B2]	55	GND TO M24-08	56	GND	55	GND TO M21-08	56	GND TO M25-08	55	GND TO M24-08	56	GND TO M25-08
57	MS00 [18A2]	58	MB12 [18A3]	57	JPSM1 [14A2]	58	INTFF* [4B4]	57	+5V	58	+5V	57	+5V	58	+5V	57	+5V	58	+5V
59	MS01 [18A2]	60	MB13 [18A3]	59	INTMFB [15B2]	60	EPB [5A4]	59	-V	60	-V	59	-V	60	-V	59	-V	60	-V
61	MS02 [18A2]	62	MB14 [18A3]	61	INTMF1 [15B2]	62	PWRDY* [19A4]												
63	MS03 [18A2]	64	MB15 [18A3]	63	PLMEM* [3B4]	64	CPPU* [4A3]												
65	MS04 [18A2]	66	MB16 [18A3]	65	BP1 [5A3]	66	ADDF1												
67	MS05 [18A2]	68	MB17 [18A3]	67	MEB [16A2]	68	ADDF0 [8B3]												
69	MS06 [18B2]	70	MB18 [18A3]	69	MFT [16A2]	70	ADDF1* [17A1]												
71	MS07 [18B2]	72	MB19 [18B3]	71	DM* [6B3]	72	ADDF0* [8B3]												
73	MS08 [18B2]	74	MB20 [18B3]	73	110* [17B2]	74	SMF1* [2A4]												
75	MS09 [18A2]	76	MB21 [18B3]	75	HLT [3B2]	76	SMF0* [2A4]												
77	MS10 [18B2]	78	MB22 [18B3]	77	I11B* [17B3]	78	BP5* [5A3]												
79	MS11 [18B2]	80	MB23 [18B3]	79	I00SC [7B1]	80	BP6* [5A3]												
81	GO [3A3]	82	BD PWR* [19A4]	81		82	TWJJS* [7B3]												
83		84	EPRDY* [3B1]	83	PSV03 TO S26-03	84	PSV04 TO S26-04												
85	XGND2 TO M25-0	86	XGND2 TO M25-0	85	GND05 TO S26-05	86	GND06 TO S26-06												

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- NOTES:
- ALL DIODES ARE G964 OR EQUIVALENT, EXCEPT AS NOTED.
 - ALL RESISTORS ARE 1/4W. ±5%, EXCEPT AS NOTED.
 - ALL CAPACITORS ARE p1, EXCEPT AS NOTED.
 - I.C. VOLTAGES, EXCEPT AS NOTED:
 - 14 PIN DIP, PIN (7) GND; PIN (14) +5V
 - 16 PIN DIP, PIN (8) GND; PIN (16) +5V
 - 24 PIN DIP, PIN (12) GND; PIN (24) +5V

- 5 - THE FOLLOWING SYMBOLS/NOTATIONS ARE USED ON THE DIAGRAM AND/OR PRINTED CIRCUIT BOARD ASSEMBLY.
- IC - INTEGRATED CIRCUIT
 - Q - TRANSISTOR
 - () - IC PIN DESIGNATION
 - - CONNECTOR DESIGNATION
 - NC - NO CONNECTION
 - SAT - SELECT AT TEST
 - (P1) - PRECISION RESISTORS 100PPM 1/4W. ±1% METAL FILM
 - ⊖ - DC COMMON
 - [FB] - FERRITE BEAD
 - ↔ - GERMANIUM DIODE
 - ⊖ - SILICON DIODE
 - ⊖ - ZENER DIODE
 - ⊖ - TUNNEL DIODE
 - ⊖ - SELENIUM DIODE



NUCLEAR DATA INC
POST OFFICE BOX 481 PALATINE ILLINOIS 60067

NO 812
MEMORY CONNECTORS
SHEET 21 OF 28

DRAWN BY: TLD CHECKED BY: RL
DATE DRAWN: 9-11-72 APPROVED BY: JG L88-0397-02

I/O CABLE CONNECTORS 526 & 527				I/O P.C. BOARD CONNECTORS 430, 430 AND 230				FRONT PANEL 528			
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
1	GND01 TO J01-7	2	GND02 [1984]	1	GND01 TO J01-7	2	GND02 [1984]	1		2	
3	PSV03 TO J01-14	4	PSV04 [1984]	3	PSV03 TO J01-14	4	PSV04 [1984]	3		4	
5	DIN* (6B3)	6	EXG0* [3A4]	5	DIN* (6B3)	6	EXG0* [3A4]	5		6	
7	EXT01* (14B1)	8	OUT00* [14B4]	7	EXT01* (14B1)	8	OUT00* [14B4]	7		8	
9	EXT01* (14B1)	10	OUT01* [14B4]	9	EXT01* (14B1)	10	OUT01* [14B4]	9		10	
11	EXT02* (14A1)	12	OUT02* [14B4]	11	EXT02* (14A1)	12	OUT02* [14B4]	11		12	
13	EXT03* (14A1)	14	OUT03* [14B4]	13	EXT03* (14A1)	14	OUT03* [14B4]	13		14	
15	EXT04* (15B1)	16	OUT04* [15B4]	15	EXT04* (15B1)	16	OUT04* [15B4]	15		16	
17	EXT05* (15B1)	18	OUT05* [15B4]	17	EXT05* (15B1)	18	OUT05* [15B4]	17		18	
19	EXT06* (15B1)	20	OUT06* [15B4]	19	EXT06* (15A1)	20	OUT06* [15B4]	19		20	
21	EXT07* (15B1)	22	OUT07* [15B4]	21	EXT07* (15A1)	22	OUT07* [15B4]	21		22	
23	EXT08* (16B1)	24	OUT08* [16B4]	23	EXT08* (16B1)	24	OUT08* [16B4]	23		24	
25	EXT09* (16A1)	26	OUT09* [16B4]	25	EXT09* (16B1)	26	OUT09* [16B4]	25	M218 (1A2)	26	EMXS0* (2B3)
27	EXT10* (16A1)	28	OUT10* [16B4]	27	EXT10* (16A1)	28	OUT10* [16B4]	27	+5L (2B4)	28	+5V (2B4)
29	EXT11* (16A1)	30	OUT11* [16B4]	29	EXT11* (16A1)	30	OUT11* [16B4]	29	0V (1B1)	30	EMXS1* (2B3)
31	EXTK* (9A2)	32	IOM00* [17A4]	31	EXTK* (9A2)	32	IOM00* [17A4]	31	MF1 (1B2)	32	ALOD1* (2B3)
33	EINTR* (4B3)	34	IOM01* [17A4]	33	EINTR* (4B3)	34	IOM01* [17A4]	33	PF0 (1B2)	34	YLOMR* [2A4]
35	XINP* (4B4)	36	IOM02* [17A4]	35	XINP* (4B4)	36	IOM02* [17A4]	35	YF0 (1A2)	36	EMXS2* (2B3)
37	CSR* (4B1)	38	IOM03* [17A4]	37	CSR* (4B1)	38	IOM03* [17A4]	37	M25B (1A2)	38	XLDPR* [2A3]
39	EXCSP* (4B2)	40	IOM04* [17A4]	39	EXCSP* (4B2)	40	IOM04* [17A4]	39	M25B (1A2)	40	BLST1* [2B4]
41	ALTER* (6B3)	42	IOM05* [17A4]	41	ALTER* (6B3)	42	IOM05* [17A4]	41	OUT01* (1A1)	42	SMF02* [2A4]
43	SDCS* (4B2)	44	IOM06* [17A4]	43	SDCS* (4B2)	44	IOM06* [17A4]	43	OUT02* (1A1)	44	SMF01* [2A4]
45	CSMRZ* (7A4)	46	IOM07* [17A4]	45	CSMRZ* (7A4)	46	IOM07* [17A4]	45	OUT03* (1A1)	46	EXG0* (1B1)
47	MRDY* (7B4)	48	IOM08* [17A4]	47	MRDY* (7B4)	48	IOM08* [17A4]	47	OUT04* (1A1)	48	SM22* [2A1]
49	PCP0* (5B4)	50	IOM09* [17A4]	49	PCP0* (5B4)	50	IOM09* [17A4]	49	OUT05* (1A1)	50	SM21* [2A1]
51	PCP1* (5B4)	52	IOM10* [17A4]	51	PCP1* (5B4)	52	IOM10* [17A4]	51	OUT06* (1A1)	52	SM20* [2A1]
53	PCP2* (5B4)	54	IOM11* [17A4]	53	PCP2* (5B4)	54	IOM11* [17A4]	53	SI* [2A3]	54	SM23* [2A1]
55	PCP3* (5B4)	56	IOM12* [17A4]	55	PCP3* (5B4)	56	IOM12* [17A4]	55	SS* [2A4]	56	SM24* [2A1]
57	SMF01* (2A4)	58	XSTCL* [3B3]	57	SMF02* (2A4)	58	XSTCL* [3B3]	57	SIG GND (2A4)	58	SM25* [2A1]
59	SMF01* (2A4)	60	EXG0 [3A4]	59	SMF01* (2A4)	60	M25Y (1A2)	59	M25B (1A2)	60	SM25* [2A1]
61	EXSKP* (12A1)	62	PCPST* (4B4)	61	EXSKP* (12A1)	62	PCPST* (4B4)	61	M25B (1A2)	62	SM26* [2A1]
63	START* (2A2)	64	ALOD1* (2B3)	63	START* (2A2)	64	ALOD1* (2B3)	63	M27B (1A2)	64	SM27* [2A1]
65	STOP* (2B3)	66	EXCLJ* (9B1)	65	STOP* (2A3)	66	EXCLJ* (9B1)	65	M24B (1A2)	66	SM27* [2B1]
67	CONT* (2A2)	68	TSTD* (12B2)	67	CONT* (2A2)	68	TSTD* (12B2)	67	OUT06* (1A1)	68	SM28* [2B1]
69	EEXAM* (2A3)	70	EMXS0* (2B3)	69	EEXAM* (2A3)	70	EMXS0* (2B3)	69	OUT07* (1B1)	70	SM29* [2B1]
71	XLDPR* (2A3)	72	EMXS1* (2B3)	71	XLDPR* (2A3)	72	EMXS1* (2B3)	71	OUT07* (1A1)	72	SM12* [2B1]
73	XLDPR* (2A4)	74	EMXS2* (2B3)	73	XLDPR* (2A4)	74	EMXS2* (2B3)	73	OUT08* (1B1)	74	SM11* [2B1]
75	SI* (2A3)	76	ARMX* (8A1)	75	SI* (2A3)	76	ARMX* (8A1)	75	OUT08* (1B1)	76	ENINT* (1B1)
77	CSP0* (11B4)	78	IOM8* [11B4]	77	CSP0* (11B4)	78	IOM8* [11B4]	77	OUT09* (1B1)	78	EEXAM* (2A3)
79	ECHO* (6B3)	80	IOM8* [11B4]	79	ECHO* (6B3)	80	IOM8* [11B4]	79	M25B (1B2)	80	START* (2A2)
81	INTPO* (11B4)	82	IOM8* [11B4]	81	INTPO* (11B4)	82	IOM8* [11B4]	81	M25B (1B2)	82	CONT* (2A2)
83	PSV03 TO P01-16	84	PSV04 TO M01-16	83	PSV03 TO P01-16	84	PSV04 TO M01-16	83	M25B (1B2)	84	
85	GND05 TO P01-8	86	GND06 TO M01-8	85	GND05 TO P01-8	86	GND06 TO M01-8	85	M25B (1B2)	86	STCP* [2A3]

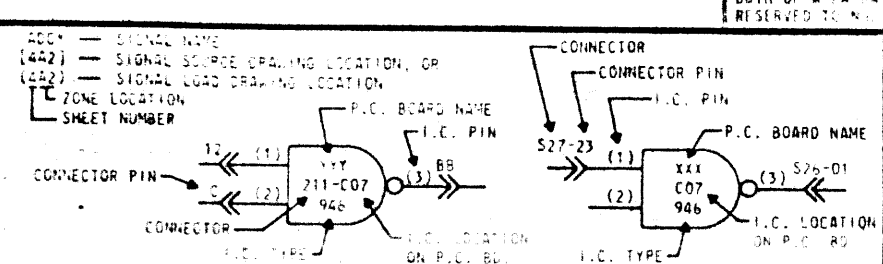
AA CONNECTOR	
PIN	SIGNAL
1	GND [1983]
2	GND [1983]
3	GND [1983]
4	GND [1983]
5	+30 MEM [19A3]
6	
7	+50V MEM [19A3]
8	+30V SENSE [19A3]
9	+5V [19B3]
10	+5V [19B3]
11	+5V [19B3]
12	+5V SENSE [19B3]

BB CONNECTOR	
PIN	SIGNAL
1	16MCD [19B3]
2	16MC [19B3]
3	-TH [19B4]
4	CNTRP [19B4]
5	OSCPUL [19B4]
6	PULLAD [19B4]
7	GND02 [19B4]
8	PULLCK [19B4]
9	PULLU [19B4]
10	PULSKP [19B4]
11	BOPWR* [19A4]
12	PWRDY* [19A4]
13	GO [19A4]
14	PSV05 [19B4]

LO1 CONNECTOR	
PIN	SIGNAL
1	16MCD [19B3]
2	16MC [19B3]
3	-TH [19B4]
4	CNTRP [19B4]
5	OSCPUL [19B4]
6	PULLAD [19B4]
7	GND02 [19B4]
8	PULLCK [19B4]
9	PULLU [19B4]
10	PULSKP [19B4]
11	BOPWR* [19A4]
12	PWRDY* [19B4]
13	GO [19A4]
14	PSV05 [19B4]

- NOTES:
- ALL DIODES ARE 5964 OR EQUIVALENT, EXCEPT AS NOTED.
 - ALL RESISTORS ARE 1/4W, 5%, EXCEPT AS NOTED.
 - ALL CAPACITORS ARE pF, EXCEPT AS NOTED.
 - I.C. VOLTAGES, EXCEPT AS NOTED:
14 PIN DIP, PIN (7) GND; PIN (14) +5V
16 PIN DIP, PIN (8) GND; PIN (16) +5V
18 PIN DIP, PIN (12) GND; PIN (24) +5V

- 5 - THE FOLLOWING SYMBOLS/NOTATIONS ARE USED ON THE DIAGRAM AND/OR PRINTED CIRCUIT BOARD ASSEMBLY.
- IC - INTEGRATED CIRCUIT
 - Q - TRANSISTOR
 - () - IC PIN DESIGNATION
 - CON - CONNECTOR DESIGNATION
 - NC - NO CONNECTION
 - SAT - SELECT AT TEST
 - (PI) - PRECISION RESISTORS 100PPH 1/8W, 1% METAL FILM
 - DC COMMON
 - FERRITE BEAD
 - GERMANIUM DIODE
 - SILICON DIODE
 - ZENER DIODE
 - TUNNEL DIODE
 - SELENIUM DIODE

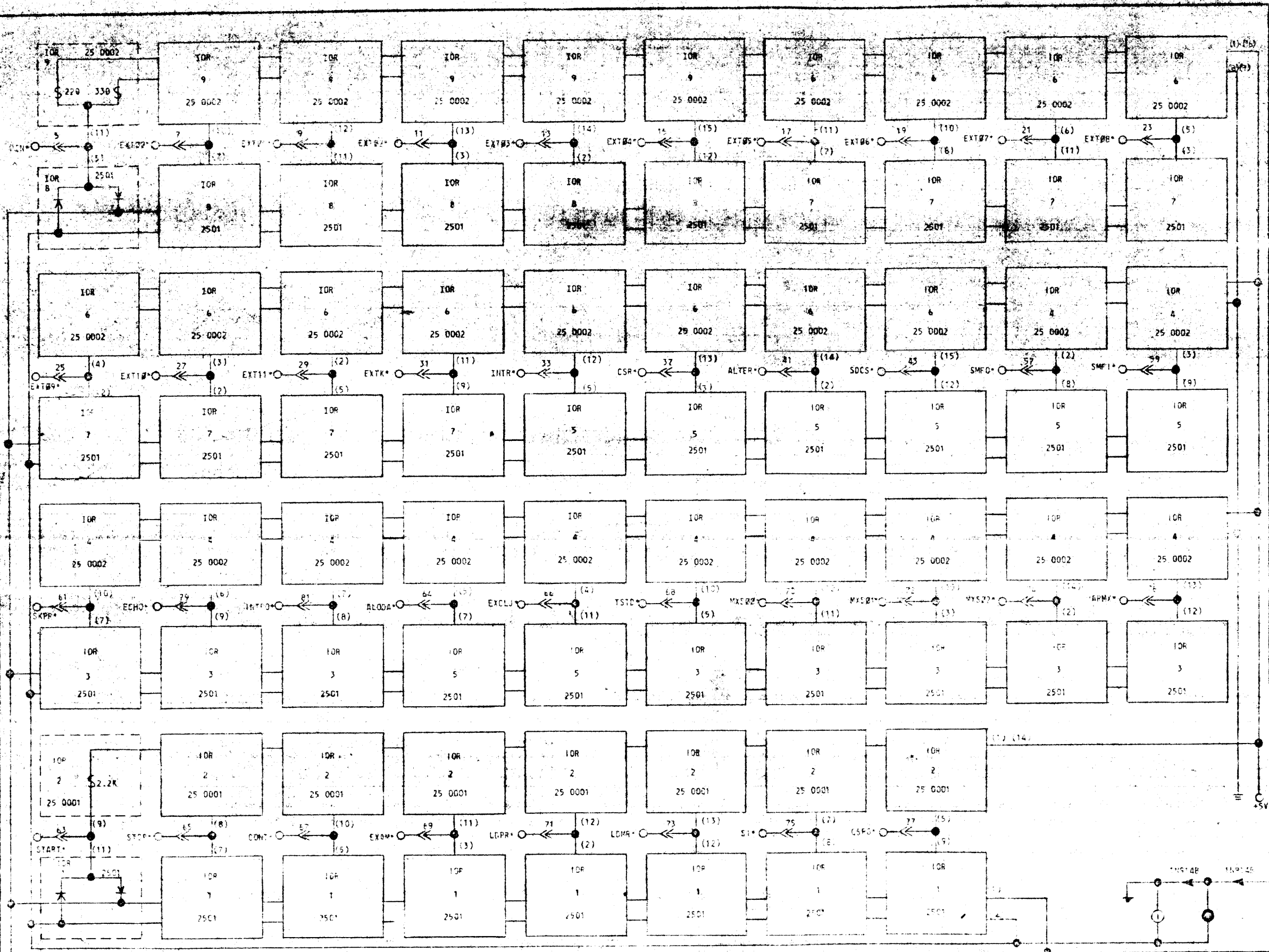


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ND NUCLEAR DATA INC
POST OFFICE BOX 451 PALM BEACH, FL 33407

NOB12
I/O "P" BOARD AND OSC CONNECTOR
SHEET 22 OF 28

DATE DRAWN: 11/14/77 CHECKED BY: JPL
APPROVED BY: JG



CONNECTOR		
SIGNAL	PIN	SIGNAL
D.C. COMMON	1	D.C. COMMON
+5V	2	
GND	3	
EXT08*	4	
EXT09*	5	
EXT02*	6	
EXT03*	7	
EXT04*	8	
EXT05*	9	
EXT06*	10	
EXT07*	11	
EXT08*	12	
EXT09*	13	
EXT10*	14	
EXT11*	15	
EXT1*	16	
EXT2*	17	
CSR*	18	
ALTER*	19	
SOC5*	20	
SMF0*	21	
SMF1*	22	
SKPR*	23	
ECHO*	24	
INFO*	25	
ALODA*	26	
EXCLU*	27	
TSTD*	28	
MXEPR*	29	
MXEPR*	30	
MYSZ*	31	
ARMY*	32	
START*	33	
STOP*	34	
CONT*	35	
EXMA*	36	
LOPR*	37	
LOPR*	38	
S1*	39	
CSPO*	40	
INSTAB	41	
INSTAB	42	
INSTAB	43	
INSTAB	44	
10	45	
5V	46	
D.C. COMMON	47	D.C. COMMON

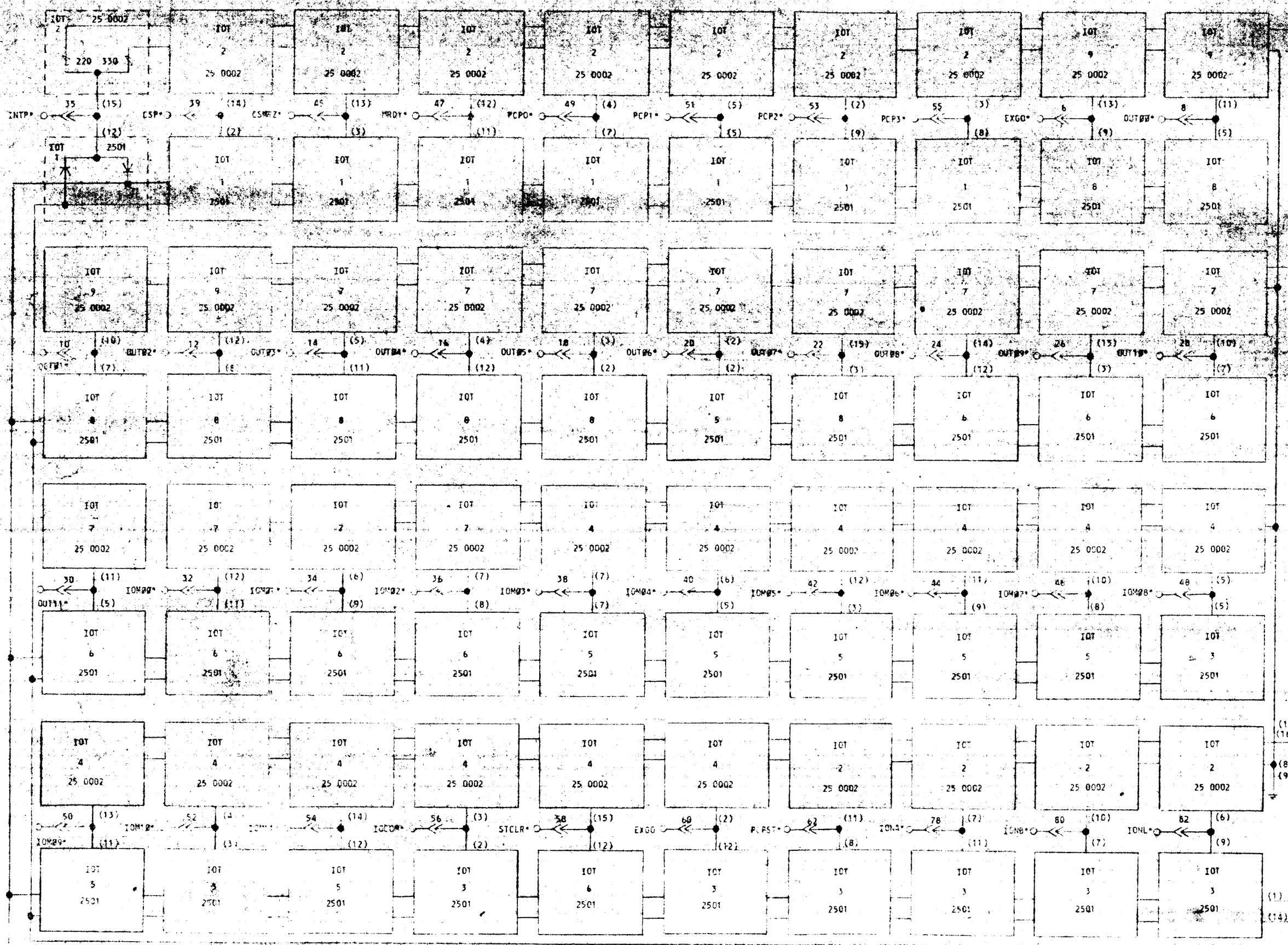
NOTES:
 1 - ALL VALUES ARE GIVEN IN DECIMALS, EXCEPT AS NOTED.
 2 - ALL DIMENSIONS ARE IN INCHES, EXCEPT AS NOTED.
 3 - ALL PARTS ARE TO BE USED AS SHOWN.
 4 - REFER TO THE SPECIFICATIONS FOR THE IDENTIFICATION OF THE PARTS.

5 - THE FOLLOWING SYMBOLS/NOTATION ARE USED ON THE DIAGRAM AND/OR PRINTED CIRCUIT BOARD ASSEMBLY:
 () - INTER-PANEL DISCONNECT
 () - TRANSISTOR
 NO - NO CONNECTION
 □ - CONNECTOR PIN DESIGNATION
 () - SELECT AT TEST
 () - PRECISION RESISTOR
 () - 1/4 WATT RESISTOR
 () - BELENGER DIODE
 * - TERMINAL BLOCK
 * - TERMINAL BLOCK
 * - TERMINAL BLOCK
 * - COMMON

NUCLEAR DATA INC.
 SYSTEM DIAGRAM
 ND-812

ND-10R-A (70-10-2) SHEET 24 OF 25

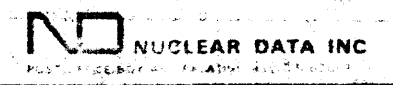
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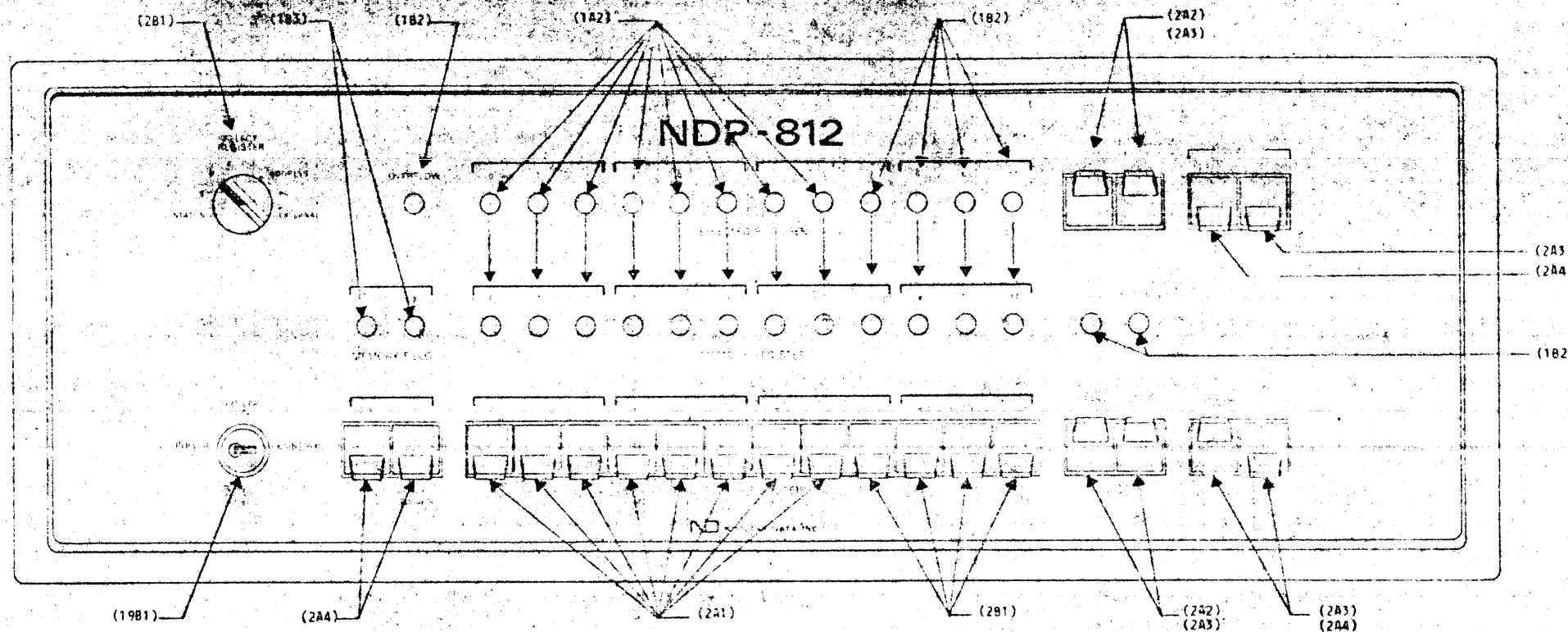
CONNECTOR			
PIN	SIGNAL	PIN	SIGNAL
1	D.C. COMMON	2	D.C. COMMON
3	+5V	4	+5V
5		6	EXGO*
7		8	OUTB0*
9		10	OUTB1*
11		12	OUTB2*
13		14	OUTB3*
15		16	OUTB4*
17		18	OUTB5*
19		20	OUTB6*
21		22	OUTB7*
23		24	OUTB8*
25		26	OUTB9*
27		28	OUTB10*
29		30	OUTB11*
31		32	IOB0*
33		34	IOB1*
35	INTP*	36	IOB2*
37		38	IOB3*
39	CSP*	40	IOB4*
41		42	IOB5*
43		44	IOB6*
45	CSMEZ*	46	IOB7*
47		48	IOB8*
49	MRDY*	50	IOB9*
51		52	IOB10*
53	PCP1*	54	IOB11*
55	PCP3*	56	IOB12*
57		58	IOB13*
59		60	EXGO
61		62	IOB14*
63		64	IOB15*
65		66	IOB16*
67		68	IOB17*
69		70	IOB18*
71		72	IOB19*
73		74	IOB20*
75		76	IOB21*
77		78	IOB22*
79		80	IOB23*
81		82	IOB24*
83		84	+5V
85	D.C. COMMON	86	D.C. COMMON

NOTES:
 1 - ALL DIODES ARE 996A OR EQUIVALENT, EXCEPT AS NOTED.
 2 - ALL RESISTORS ARE 1/4W, 5%, EXCEPT AS NOTED.
 3 - ALL CAPACITORS ARE 5%, EXCEPT AS NOTED.
 4 - REFER TO ND SPEC. 100-0060 FOR I.C. CROSS REFERENCE INFORMATION.

5 - THE FOLLOWING SYMBOLS/NOTATIONS ARE USED ON THE DIAGRAM AND/OR PRINTED CIRCUIT BOARD ASSEMBLY.
 IC - INTEGRATED CIRCUIT
 T - TRANSISTOR
 NC - NO CONNECTION
 □ - CONNECTOR PIN DESIGNATION
 () - IC PIN DESIGNATION
 SAT - SELECT AT TEST
 (P1) - PRECISION RESISTORS
 1/8W, 1/4W METAL FILM
 SELENIUM DIODE
 + SILICON DIODE
 GERMANIUM DIODE
 ZENER DIODE
 TUNNEL DIODE
 DC COMMON



SYSTEM DIAGRAM
 ND-812
 ND-ICT-4 (70-1813)
 J.E.C. P.S.V.W. S.H.T. 25 28
 L68 0007 00



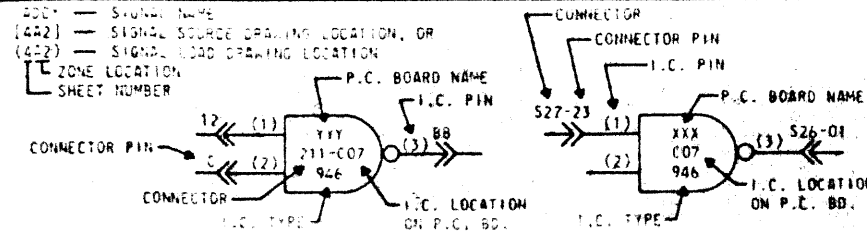
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NOTES:

- 1 - DIODES ARE 6964 OR EQUIVALENT, EXCEPT AS NOTED.
- 2 - ALL RESISTORS ARE 1/4W, 15%, EXCEPT AS NOTED.
- 3 - ALL CAPACITORS ARE pF, EXCEPT AS NOTED.
- 4 - I.C. VOLTAGES, EXCEPT AS NOTED:
 - 14 PIN DIP, PIN (7) GND; PIN (14) +5V
 - 16 PIN DIP, PIN (8) GND; PIN (16) +5V
 - 24 PIN DIP, PIN (12) GND; PIN (24) +5V

5 - THE FOLLOWING SYMBOLS/NOTATIONS ARE USED ON THE DIAGRAM AND/OR PRINTED CIRCUIT BOARD ASSEMBLY.

- IC - INTEGRATED CIRCUIT
- Q - TRANSISTOR
- () - IC PIN DESIGNATION
- > - CONNECTOR DESIGNATION
- NC - NO CONNECTION
- SAT - SELECT AT TEST
- (P1) - PRECISION RESISTORS 100PPM 1/8W, 1% METAL FILM
- DC COMMON
- [FB] - FERRITE BEAD
- >— GERMANIUM DIODE
- >— SILICON DIODE
- >— ZENER DIODE
- >— TUNNEL DIODE
- >— SELENIUM DIODE

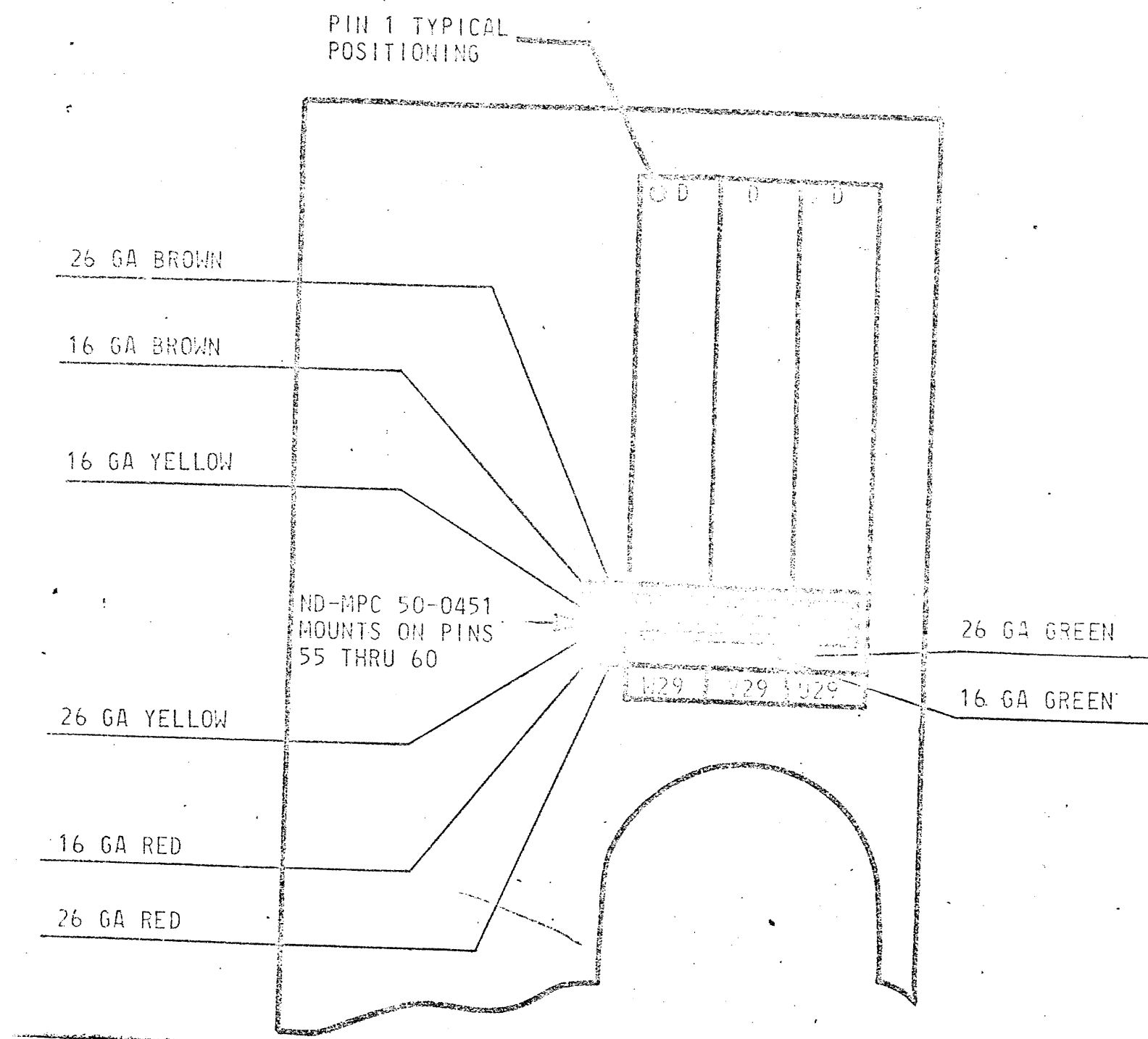


ND NUCLEAR DATA INC
POST OFFICE BOX 451 PALATKA ILLINOIS 60467

ND-812
FRONT PANEL RENDERING

DRAWN BY: D W D	CHECKED BY: S V W	SHEET 26 OF 28
DATE DRAWN: 10/20/70	APPROVED BY: R I	LOG 007-01

"D" DENOTES DOUBLE CONNECTOR



L88-0397-01 (SH 27)

Figure 7-2. ND812, Bussing Diagram (Sheet 27 Of 28)

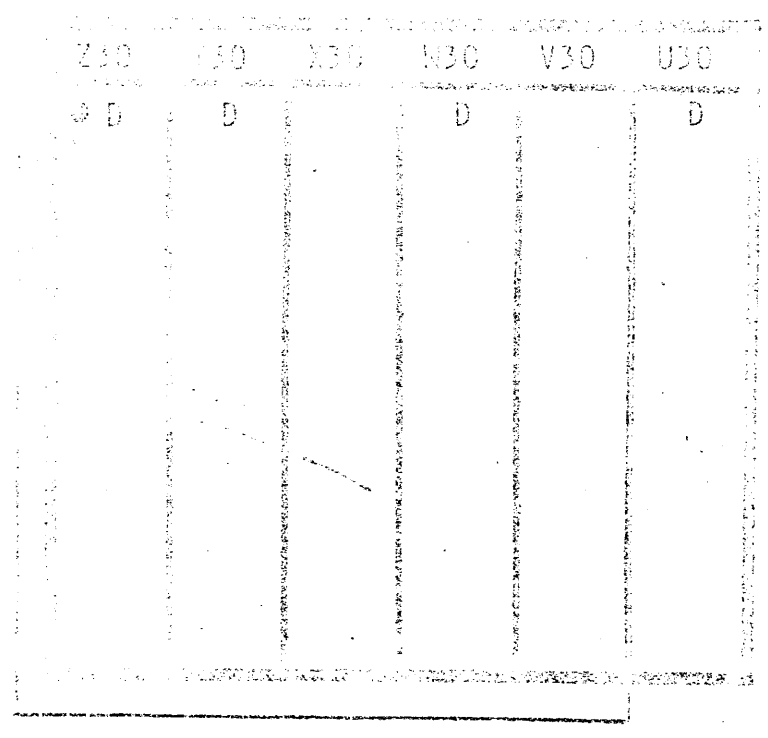
NOTES:

1 - "D" DENOTES DOUBLE CONNECTOR.

REAR VIEW

ND-MBD 50-0446

FIG 1 TYP.
POSITIONING



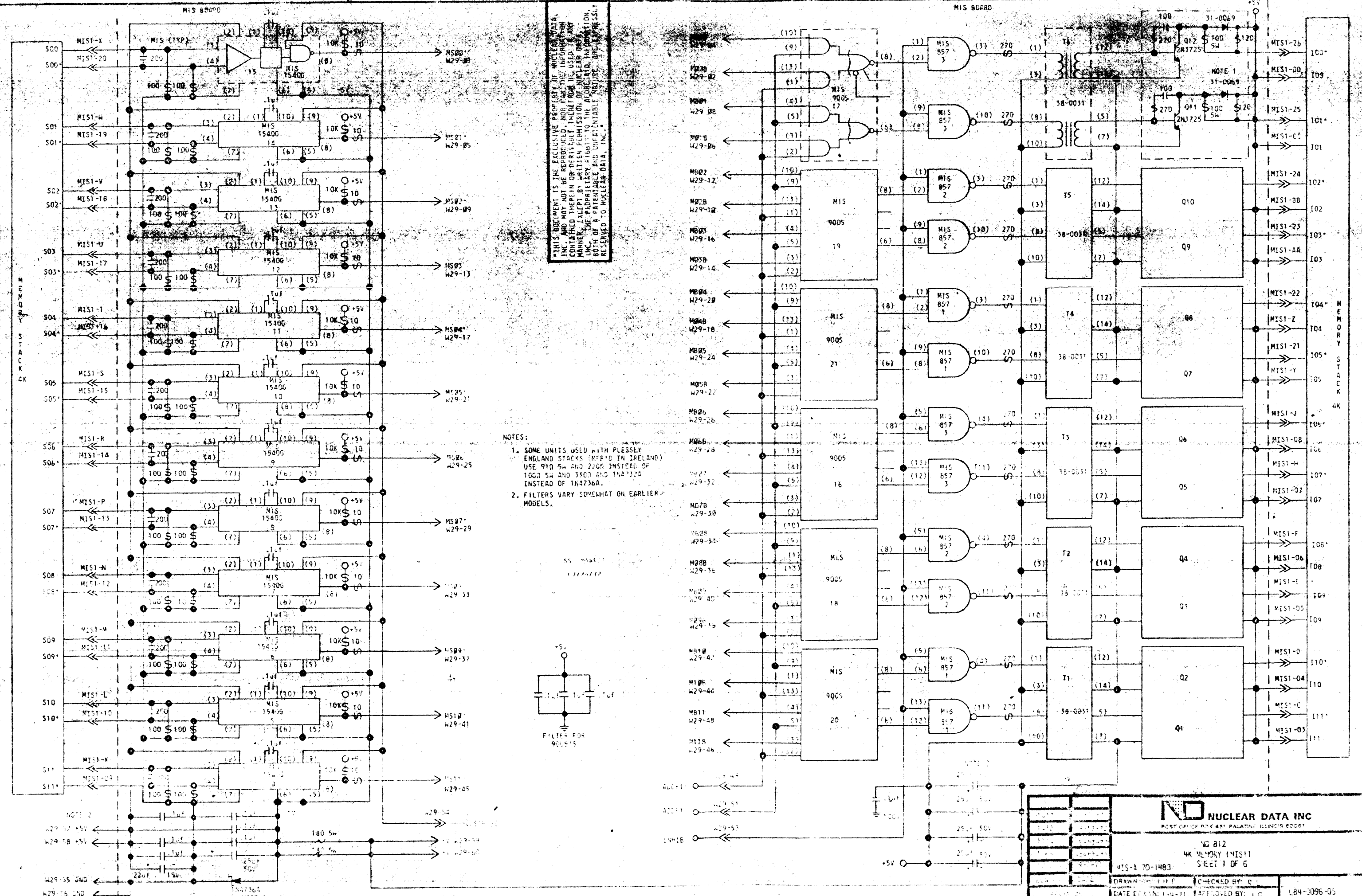
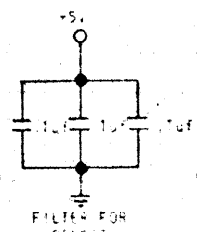
L88-0397-00 (SH 28)

Figure 7-2. ND812, Bussing Diagram (Sheet 28 of 28)

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NOTES:

1. SOME UNITS USED WITH PLESSEY ENGLAND STACKS (ENGLAND, IRELAND) USE 910 5W AND 220R INSTEAD OF 100R 5W AND 330R AND 1N4732R INSTEAD OF 1N4736A.
2. FILTERS VARY SOMEWHAT ON EARLIER MODELS.



ND NUCLEAR DATA INC
 POST OFFICE BOX 451 PALM SPRING, CALIF. 92501

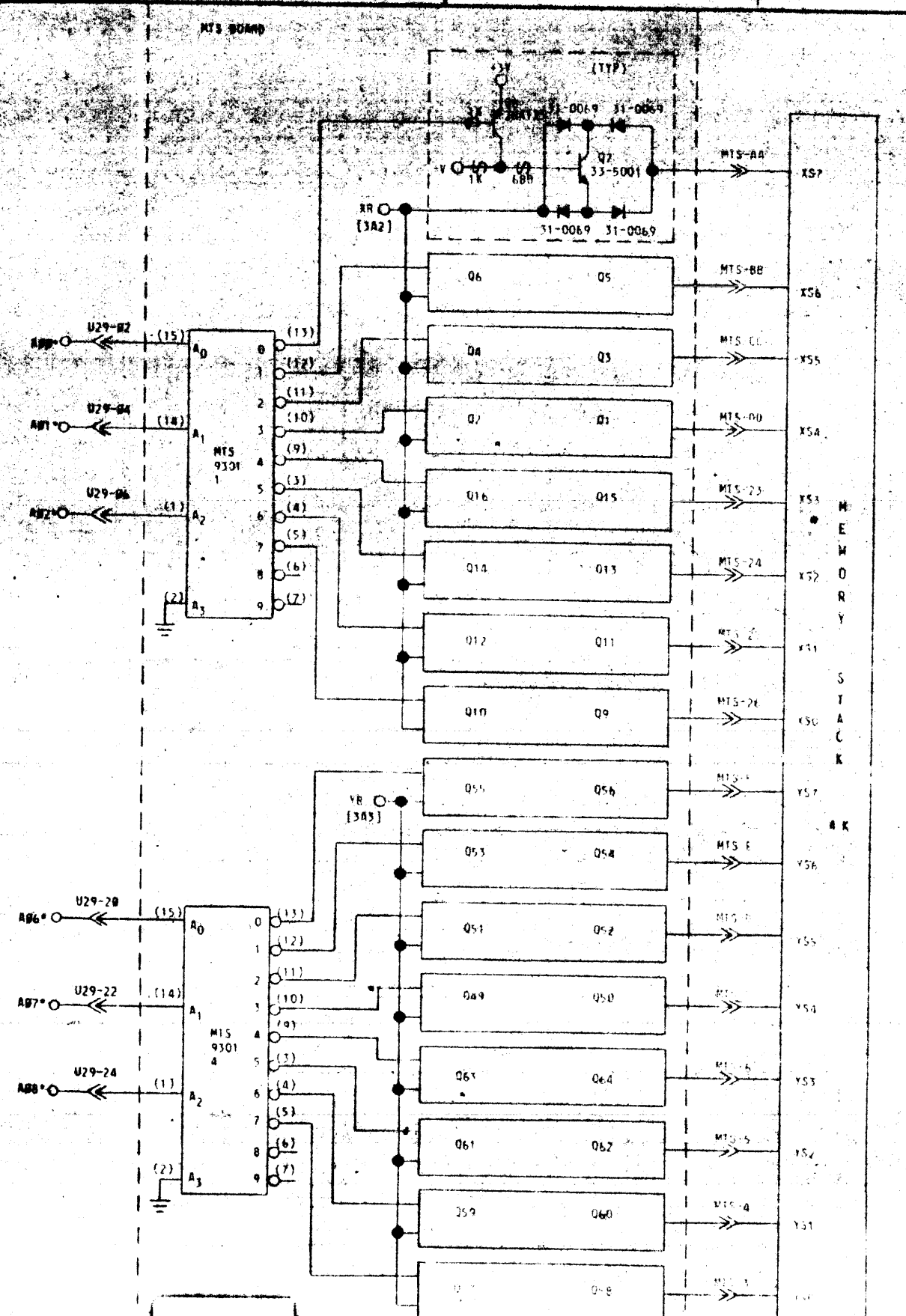
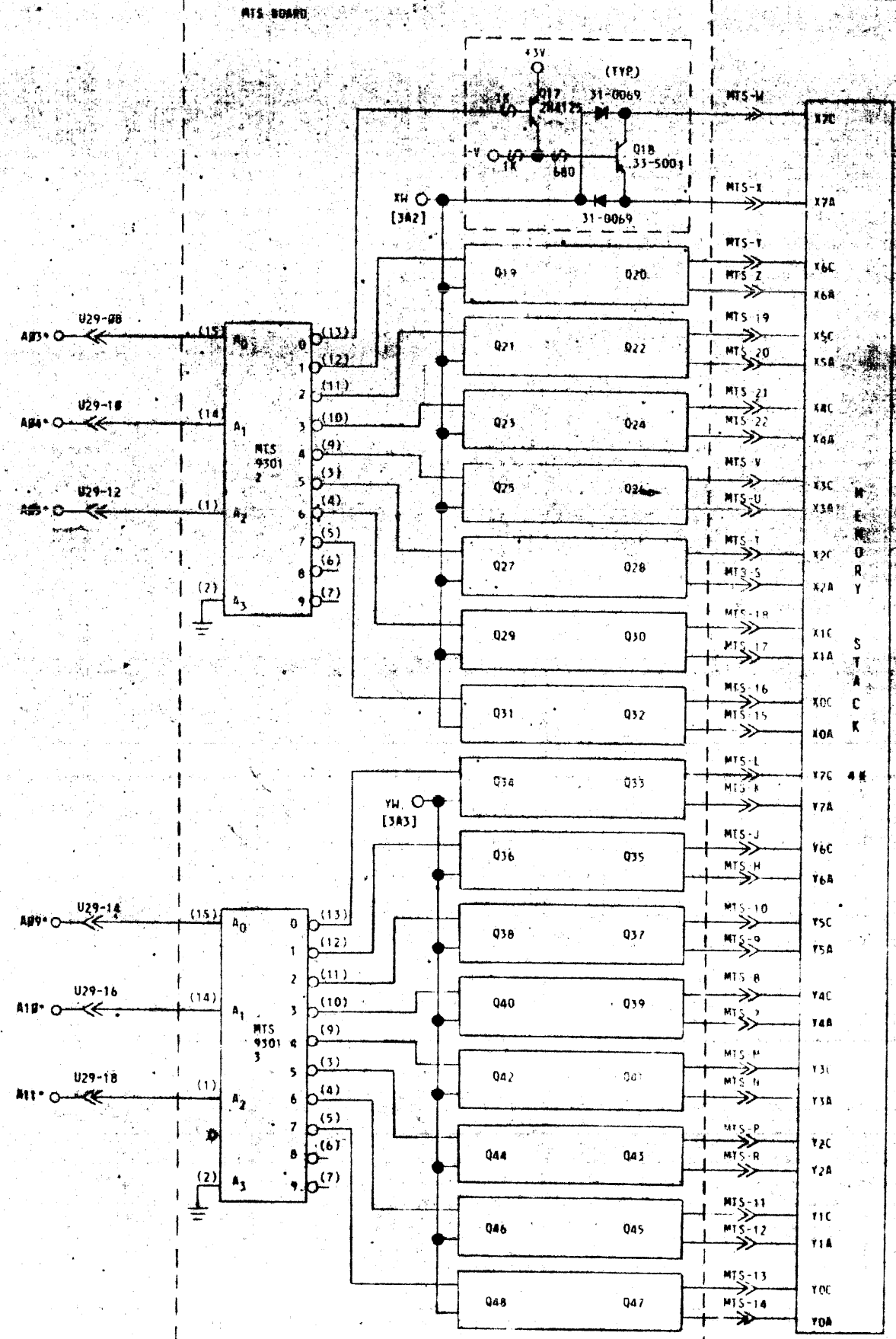
ND 812
 4K MEMORY (MIS)
 SHEET 1 OF 6

MIS-1 70-1483

DRAWN BY: [] CHECKED BY: []
 DATE: [] APPROVED BY: []

184-3096-05

PENDING ECN

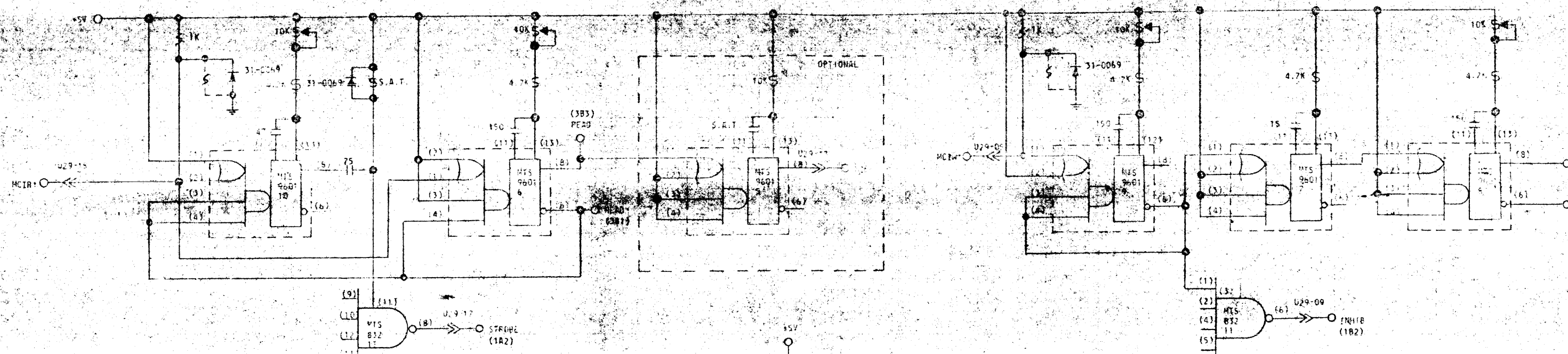


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NO NUCLEAR DATA INC	
POST OFFICE BOX 434 PALM BEACH, FLORIDA 33402	
NO 812	
4K MEMORY (MTS)	
SHEET 2 OF 6	
1352	6-7-72
ECN	DATE
DRAWN BY: J.P.S.	CHECKED BY: R.L.
DATE DRAWN: 4-7	APPROVED BY: J.G.
104-0096	

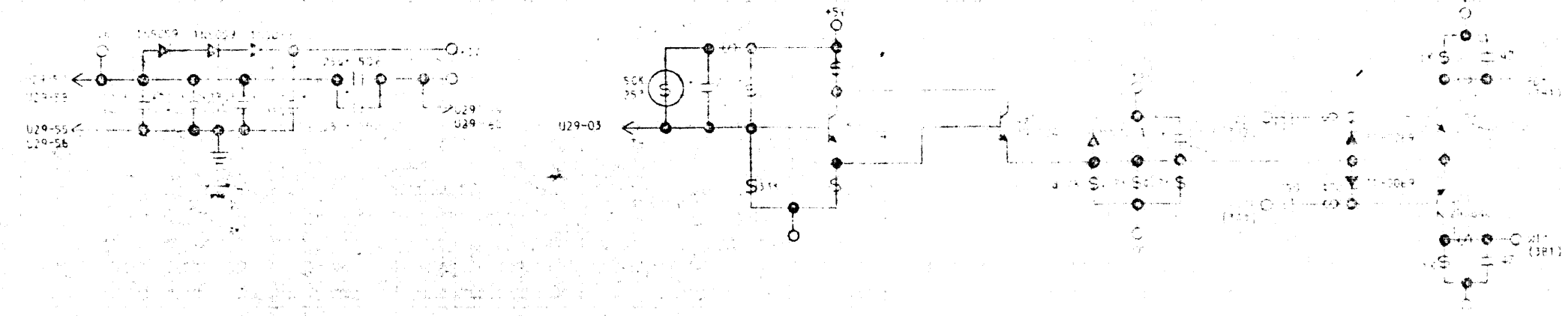
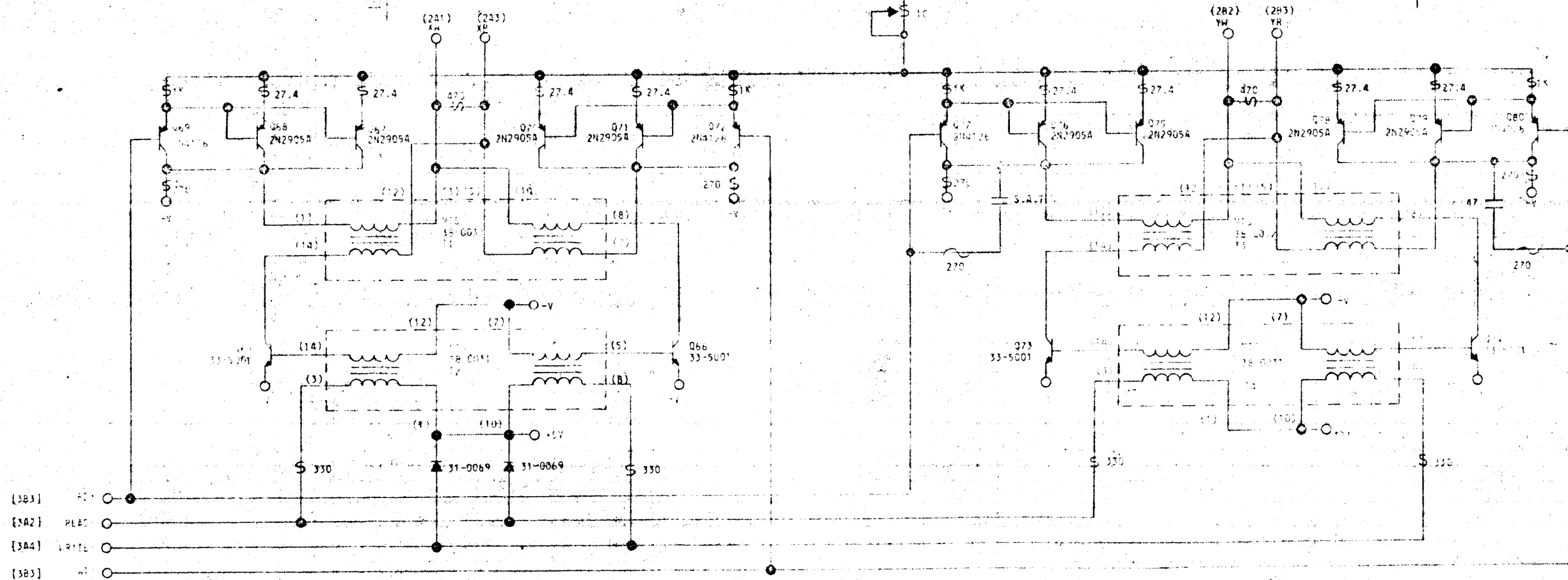
A


A



B

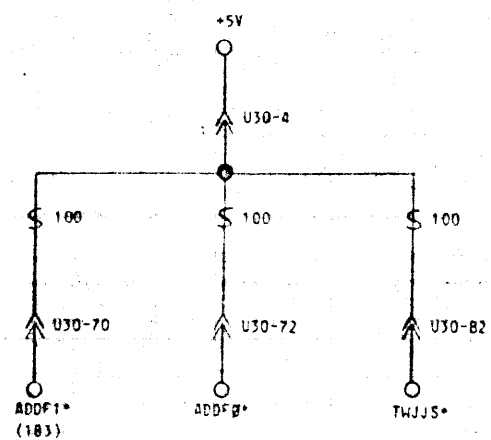
B




NUCLEAR DATA INC.
 4K MEMORY (MTS)
 SHEET 3 OF 4
 184-0135-03

MTS CONNECTOR U29				MIS CONNECTOR U29				MTS CONNECTOR TO STACK				MIS 1 CONNECTOR TO STACK					
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL		
1		2	AP0*	(2B3)	1	MS00*	(1A2)	2	MB00	(1A3)	1		A				
3	TH-	(3B2)	4	AP1*	(2B3)	3		4	MB01	(1A3)	2		B				
5	MCI-W*	(3A3)	6	AP2*	(2B3)	5	MS01*	(1A2)	6	MB02	(1A3)	3	YS0	(2B4)	C	YS4	(2B4)
7			8	AP3*	(2B1)	7		8	MB03	(1A3)	4	YS1	(2B4)	D	YS5	(2B4)	
9	INHIB	(3A2)(1B3)	10	AP4*	(2B1)	9	MS02*	(1A2)	10	MB04	(1A3)	5	YS2	(2B4)	E	YS6	(2B4)
11			12	AP5*	(2B1)	11		12	MB05	(1A3)	6	YS3	(2B4)	F	YS7	(2B4)	
13	WTD	(3A1)	14	AP6*	(2B1)	13	MS03*	(1A2)	14	MB06	(1A3)	7	YS4	(2B2)	H	YS8	(2B2)
15	MCI-R*	(3A1)	16	AP7*	(2B1)	15		16	MB07	(1A3)	8	YS5	(2B2)	J	YS9	(2B2)	
17	STROBE	(3A2)(1B2)	18	AP8*	(2B1)	17	MS04*	(1A2)	18	MB08	(1A3)	9	YS6	(2B2)	K	YS10	(2B2)
19			20	AP9*	(2B3)	19		20	MB09	(1A3)	10	YS7	(2B2)	L	YS11	(2B2)	
21			22	AP10*	(2B3)	21	MS05*	(1A2)	22	MB10	(1A3)	11	YS8	(2B2)	M	YS12	(2B2)
23			24	AP11*	(2B3)	23		24	MB11	(1A3)	12	YS9	(2B2)	N	YS13	(2B2)	
25			26	AP12*	(2B3)	25	MS06*	(1A2)	26	MB12	(1A3)	13	YS10	(2B2)	P	YS14	(2B2)
27			28	AP13*	(2B3)	27		28	MB13	(1A3)	14	YS11	(2B2)	R	YS15	(2B2)	
29			30	AP14*	(2B3)	29	MS07*	(1B2)	30	MB14	(1B3)	15	X0A	(2A2)	S	X2A	(2A2)
31			32	AP15*	(2B3)	31		32	MB15	(1B3)	16	X0B	(2A2)	T	X2B	(2A2)	
33			34	AP16*	(2B3)	33	MS08*	(1B2)	34	MB16	(1B3)	17	X0C	(2A2)	U	X2C	(2A2)
35			36	AP17*	(2B3)	35		36	MB17	(1B3)	18	X0D	(2A2)	V	X2D	(2A2)	
37			38	AP18*	(2B3)	37	MS09*	(1B2)	38	MB18	(1B3)	19	X0E	(2A2)	W	X2E	(2A2)
39			40	AP19*	(2B3)	39		40	MB19	(1B3)	20	X0F	(2A2)	X	X2F	(2A2)	
41			42	AP20*	(2B3)	41	MS10*	(1B2)	42	MB20	(1B3)	21	X0G	(2A2)	Y	X2G	(2A2)
43			44	AP21*	(2B3)	43		44	MB21	(1B3)	22	X0H	(2A2)	Z	X2H	(2A2)	
45			46	AP22*	(2B3)	45	MS11*	(1B2)	46	MB22	(1B3)	23	X0I	(2A4)	AA	X2I	(2A4)
47			48	AP23*	(2B3)	47		48	MB23	(1B3)	24	X0J	(2A4)	BB	X2J	(2A4)	
49			50	AP24*	(2B3)	49	ADD1*	(1B2)	50		25	X0K	(2A4)	CC	X2K	(2A4)	
51			52	AP25*	(2B3)	51	ADD1*	(1B2)	52		26	X0L	(2A4)	DD	X2L	(2A4)	
53			54	INHIB	(1B3)(3A4)	54	STROBE	(1B2)(3A2)	54	STROBE	(1B2)(3A2)	27		EE			
55	D.C. COM.	(3B1)	56	D.C. COM.	(3B1)	55	GND	(1B1)	56	GND	(1B1)	28		FF			
57	+5	(3B1)	58	+5	(3B1)	57	+5	(1B1)	58	+5	(1B1)						
59	-V	(3B1)	60	-V	(3B1)	59	-V	(1B1)	60	-V	(1B1)						

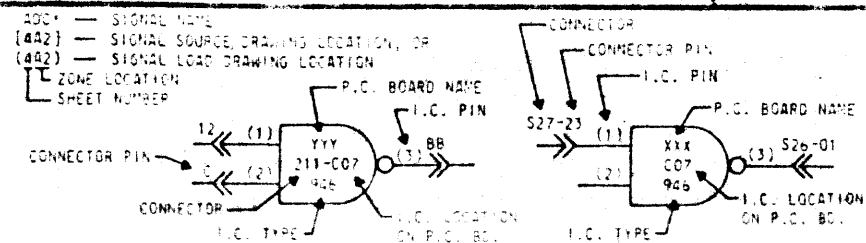
TCC CABLE CONNECTOR U30			
PIN	SIGNAL	PIN	SIGNAL
1	GND	2	GND
3	+5V	4	+5V (4B3)
67	GND	66	GND
69	GND	68	GND
83	+5V	70	ADD1* (4B3)
85	GND	72	ADD1* (4B3)
		82	TWJJS* (4B3)
		84	+5V
		86	GND



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- NOTES:
- ALL DIODES ARE 0964 OR EQUIVALENT, EXCEPT AS NOTED.
 - ALL RESISTORS ARE 1/4W, 5%, EXCEPT AS NOTED.
 - ALL CAPACITORS ARE .01, EXCEPT AS NOTED.
 - I.C. VOLTAGES, EXCEPT AS NOTED:
14 PIN DIP, PIN (7) GND; PIN (14) +5V
16 PIN DIP, PIN (8) GND; PIN (16) +5V
24 PIN DIP, PIN (12) GND; PIN (24) +5V

- 5 - THE FOLLOWING SYMBOLS/NOTATIONS ARE USED ON THE DIAGRAM AND/OR PRINTED CIRCUIT BOARD ASSEMBLY:
- IC - INTEGRATED CIRCUIT
 - Q - TRANSISTOR
 - () - IC PIN DESIGNATION
 - ➔ - CONNECTOR DESIGNATION
 - NC - NO CONNECTION
 - SAT - SELECT AT TEST
 - (P1) - PRECISION RESISTORS 100PPM 1/8W, 5% METAL FILM
 - ⊖ - DC COMMON
 - ⊖ - FERRITE BEAD
 - ➔ - GERMANIUM DIODE
 - ➔ - SILICON DIODE
 - ➔ - ZENER DIODE
 - ➔ - TUNNEL DIODE
 - ➔ - SELENIUM DIODE

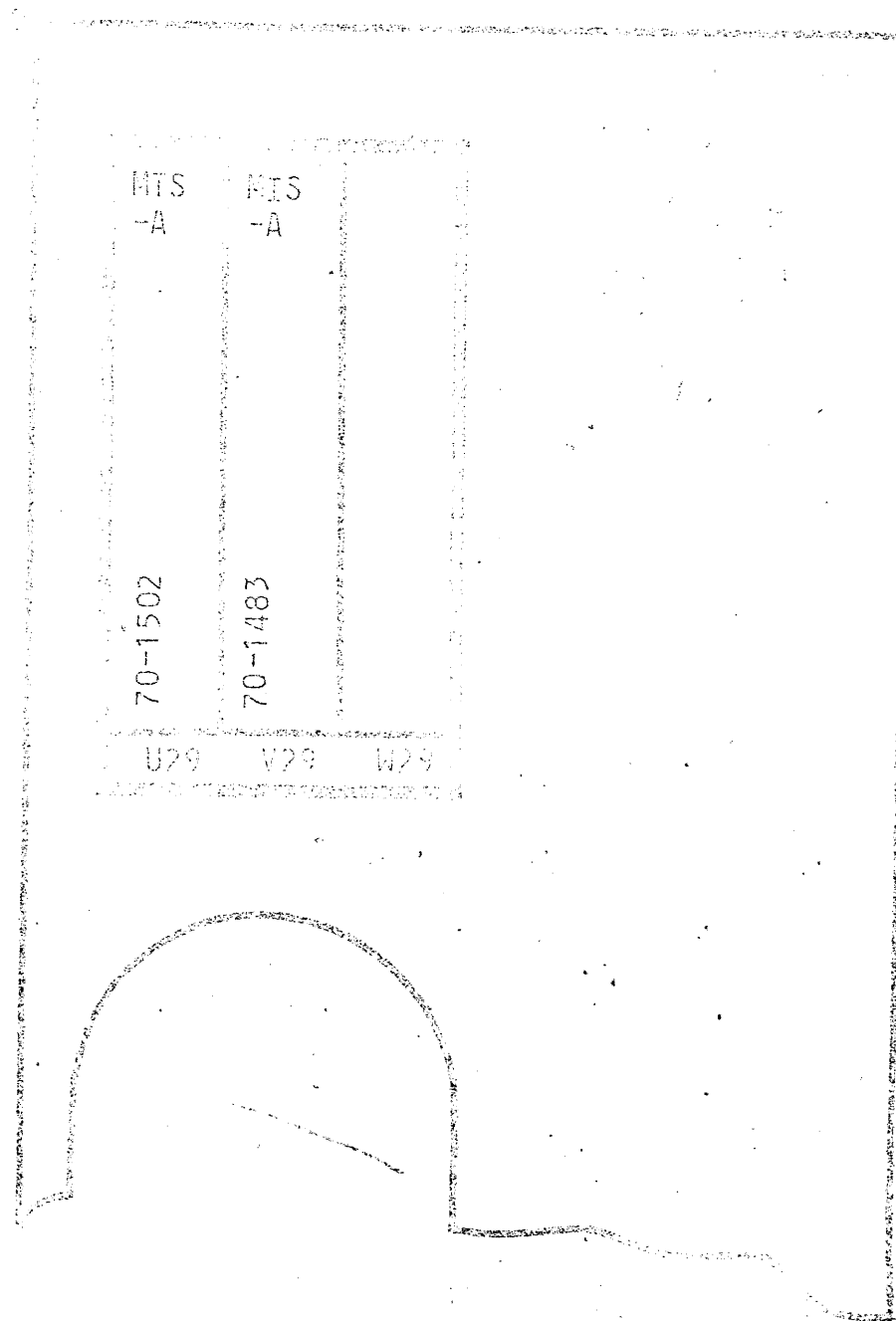


ND NUCLEAR DATA INC
POST OFFICE BOX 451 PALATINE ILLINOIS 60067

ND-812
4K MEMORY CONNECTORS

DRAWN BY: J.O.C. CHECKED BY: S.W.J. SHEET 4 OF 4
DATE DRAWN: 1-4-71 APPROVED BY: R.L. 184-100-1001

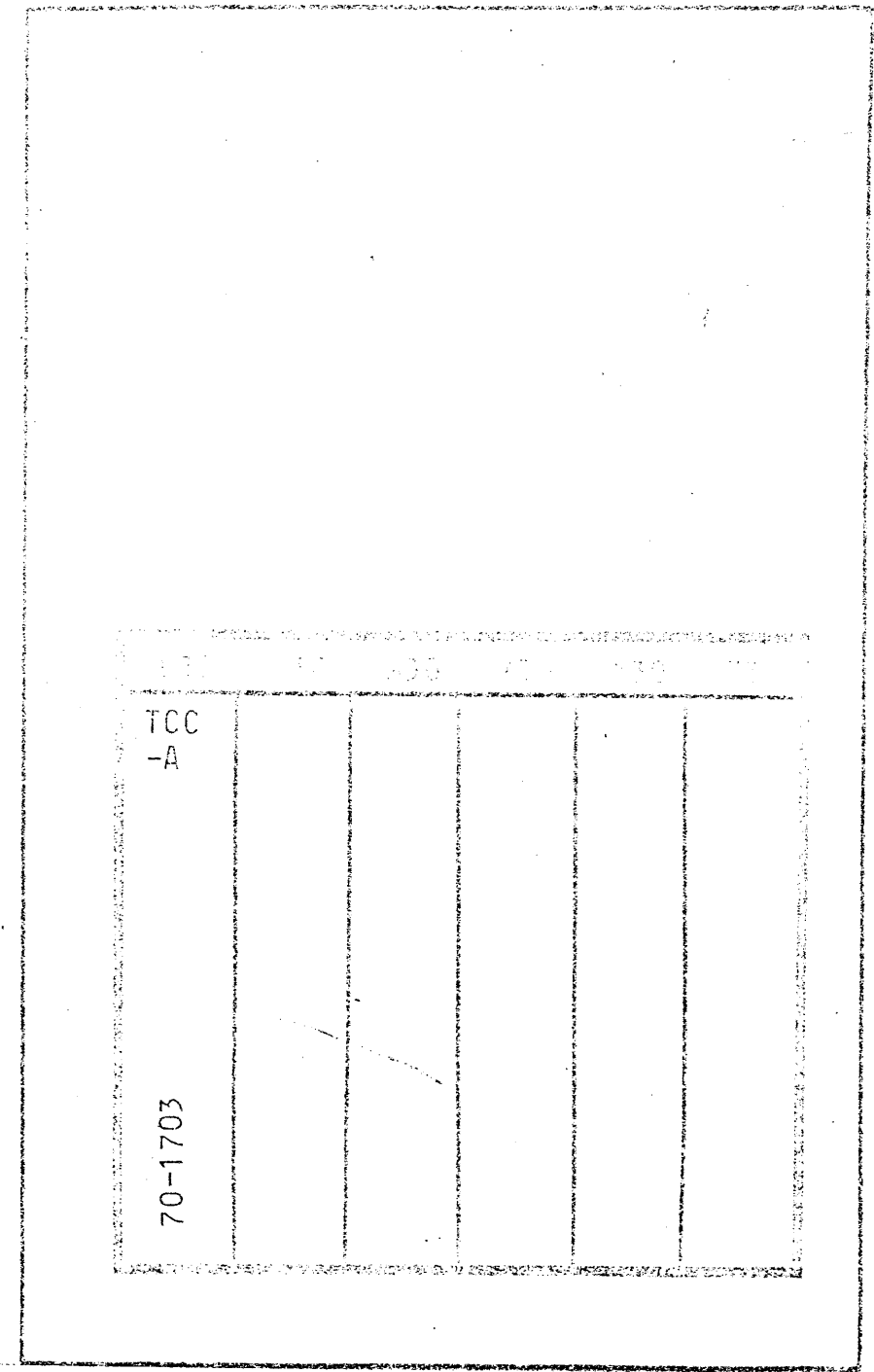
FRONT VIEW



L84-0096-00 (SH 5)

Figure 7-3. ND812 4K Memory, Loading Diagram (Sheet 5 of 6)

FRONT VIEW



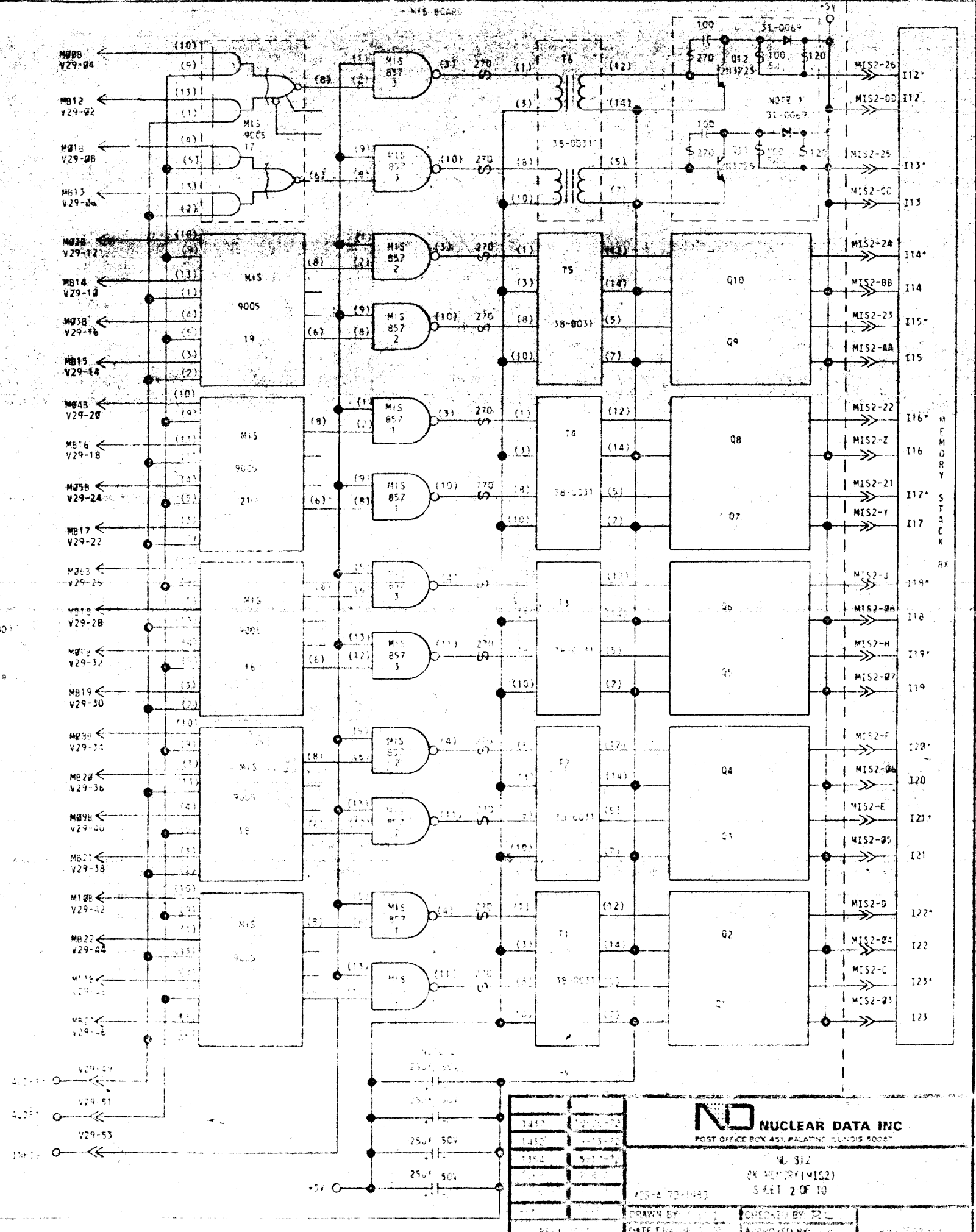
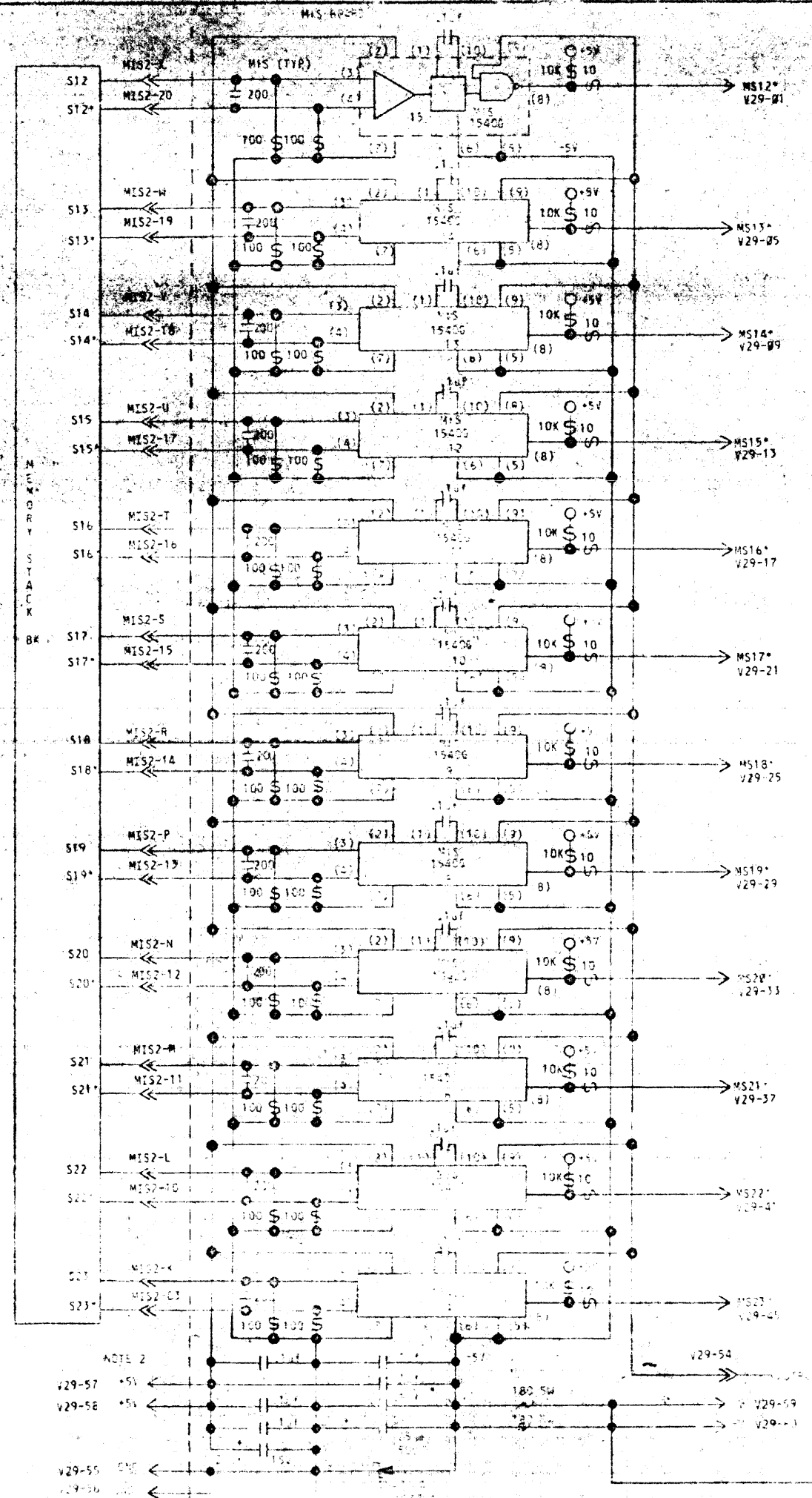
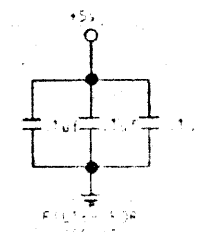
L84-0096-00 (SH 6)

Figure 7-3. ND812 4K Memory, Loading Diagram (Sheet 6 of 6)

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NOTES:

- SOME UNITS USED WITH PREVIOUS EMBLING STAMP. IN THIS INSTEAD OF USE 9005 AND 1000 INSTEAD OF 1000 SW AND 1000 SW INSTEAD OF 1000 SW.
- FILTERS VARY SOMEWHAT ON EARLIER MODELS.



ND NUCLEAR DATA INC
 POST OFFICE BOX 451, PALM SPRING, CALIFORNIA 92262

NO. 312
 SK MEMORY (MIS2)
 SHEET 2 OF 10

DATE: 10-1-68
 DRAWN BY: []
 CHECKED BY: []
 DATE: []
 APPROVED BY: []

A

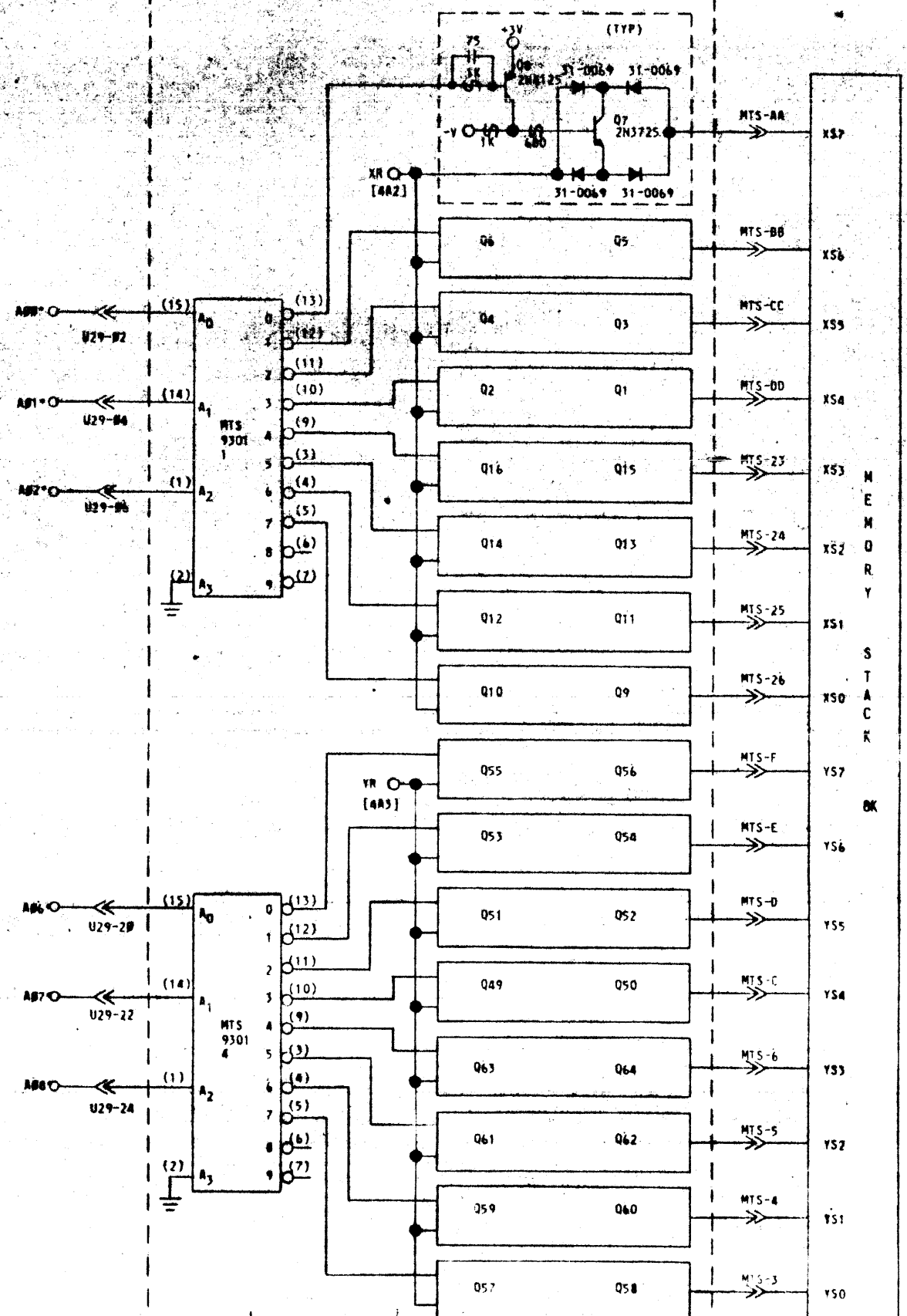
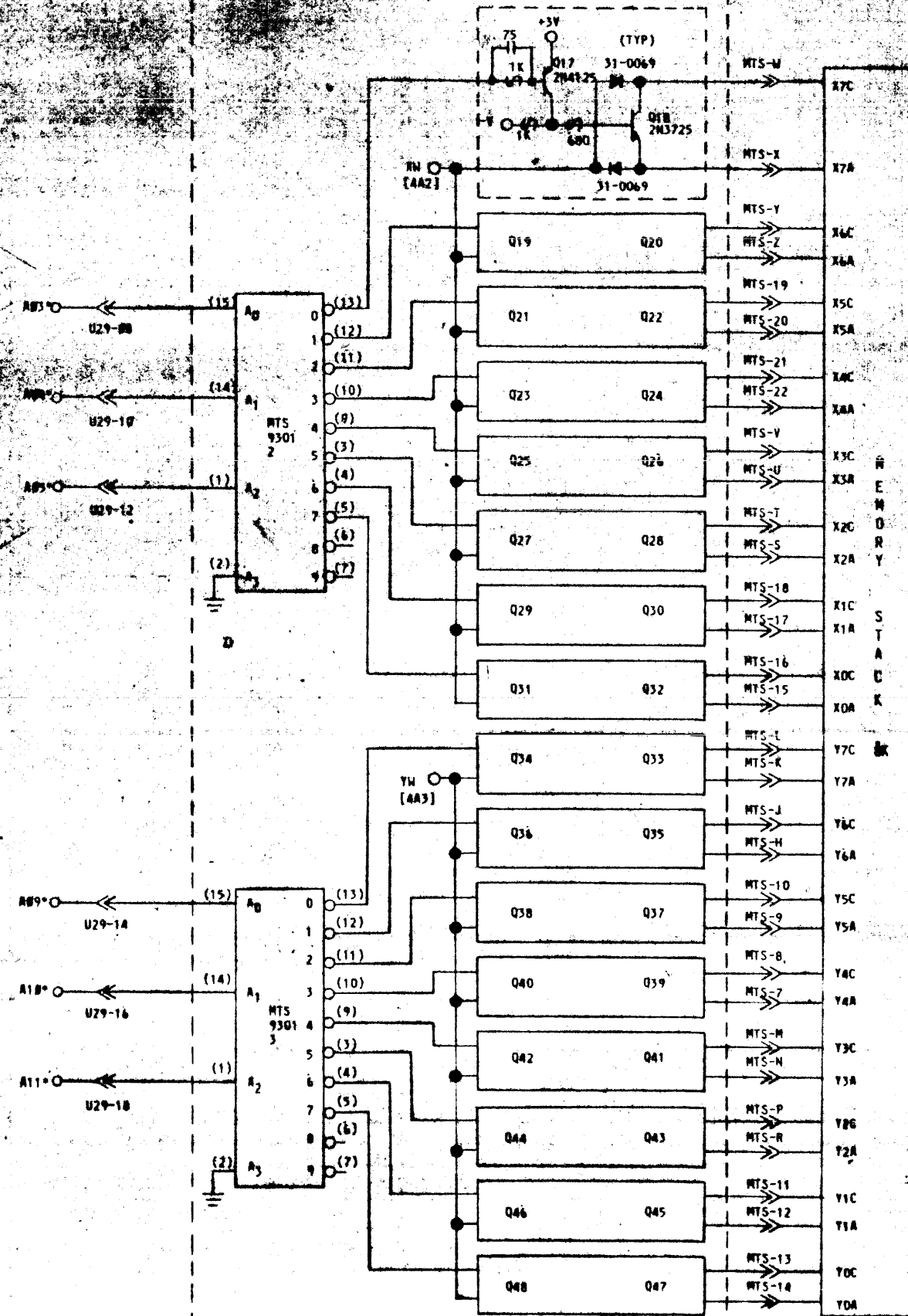
A

B

B

MTS BOARD

MTS BOARD



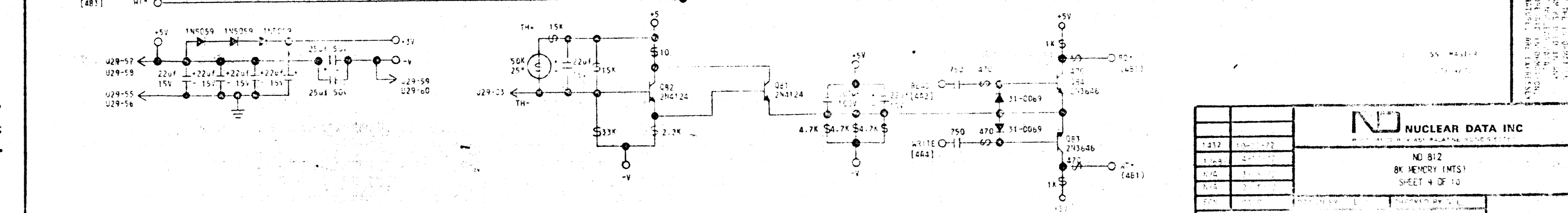
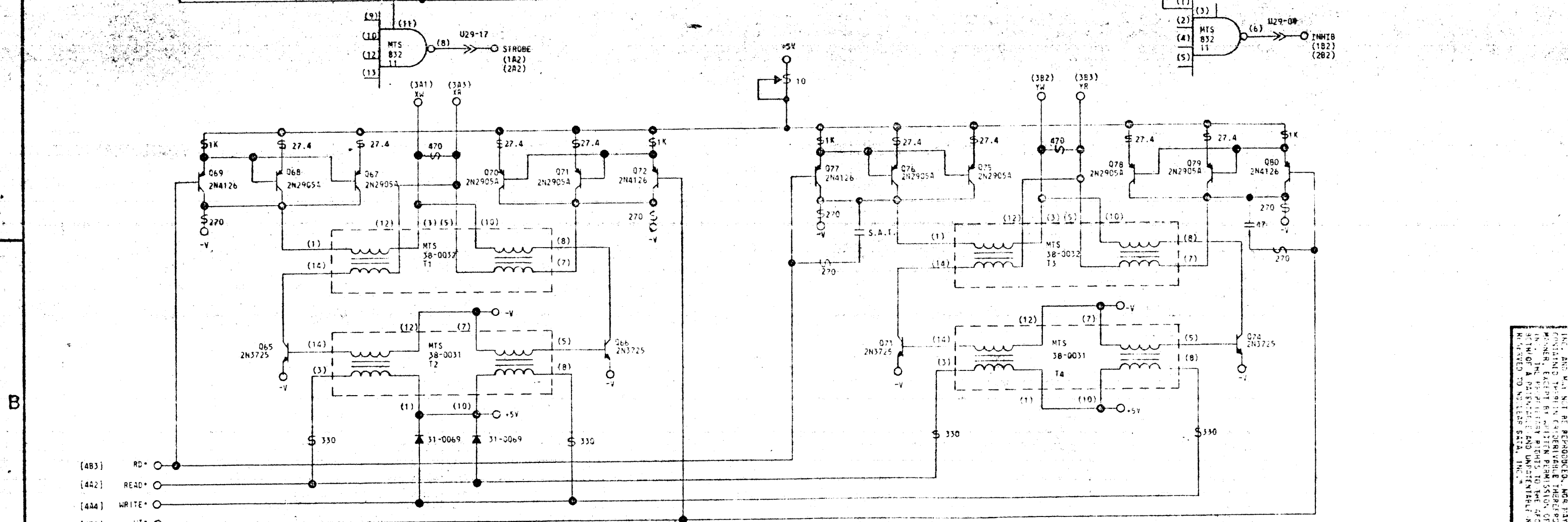
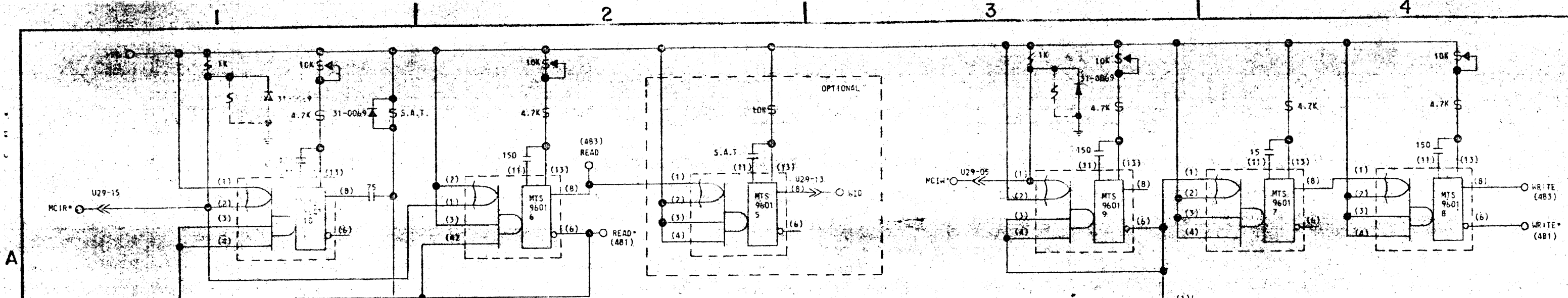
SS MASTER
07/24/72

ND NUCLEAR DATA INC
POST OFFICE BOX 481, PALATKA, ILLINOIS 60087

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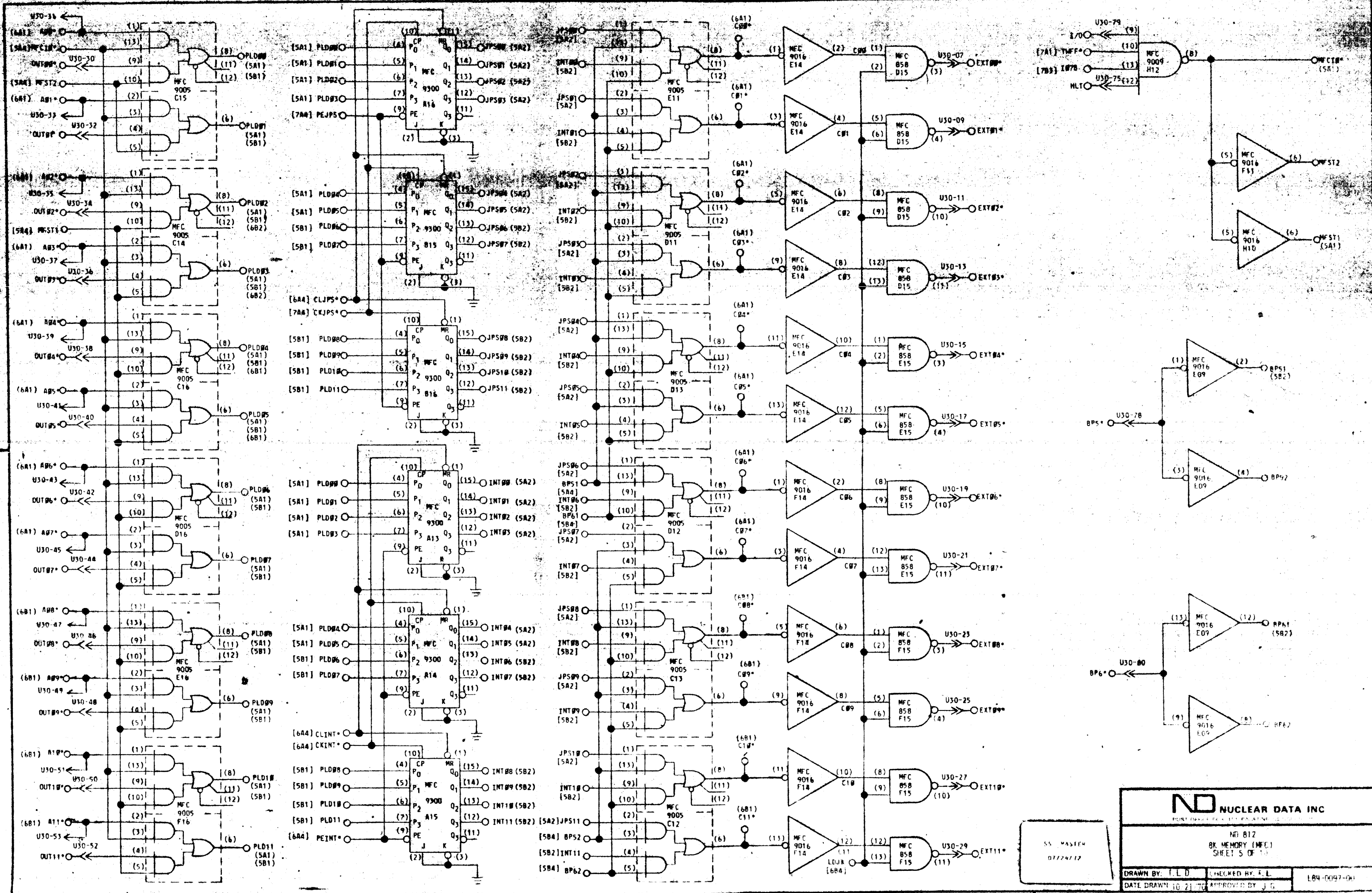
1352		6-7-72		NO 812	
126B		2-8-72		8K MEMORY (MTS)	
EEN		DATE		SHEET 3 OF 10	
REVISIONS		DRAWN BY: T. L. D.		CHECKED BY: J. G.	
		DATE DRAWN: 10/20/70		APPROVED BY: J. G.	
				1.84-0097-02	

P. 100-MS ECK



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NUCLEAR DATA INC.	
NO 812	
8K MEMORY (MTS)	
SHEET 4 OF 10	
DATE	10-11-72
REV.	1
REV.	2
REV.	3
REV.	4
REV.	5
REV.	6
REV.	7
REV.	8
REV.	9
REV.	10



ND NUCLEAR DATA INC
 HEADQUARTERS: 1000 EAST 17TH AVENUE, DENVER, COLORADO 80202

NF 812
 BK MEMORY (MFC)
 SHEET 5 OF 10

DRAWN BY: T.L.D. CHECKED BY: F.L.
 DATE DRAWN: 10-21-70 APPROVED BY: J.G.

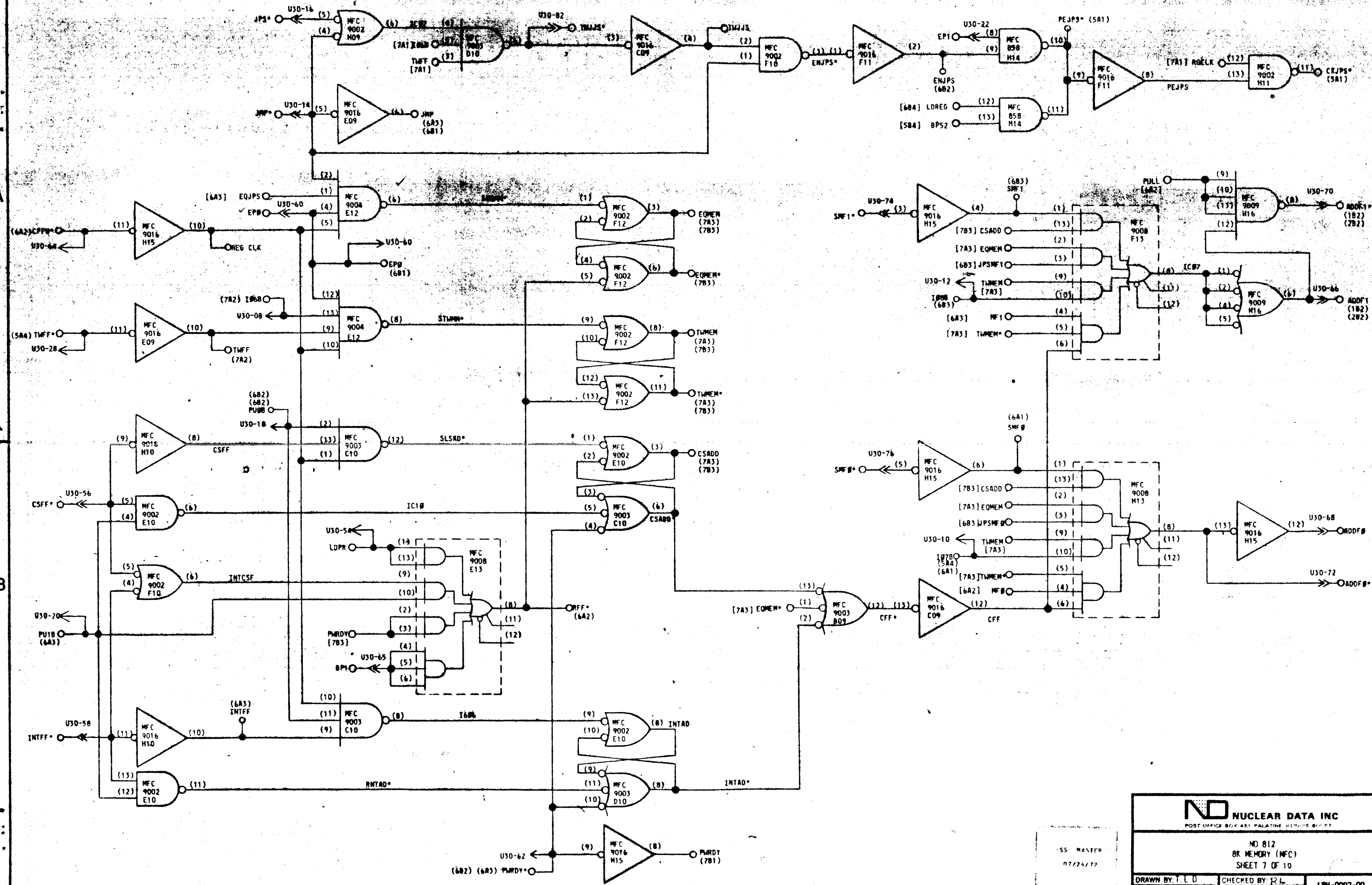
L84-0097-00

A

A

B

B



NO NUCLEAR DATA INC
POST OFFICE BOX 481 PALATINE ILLINOIS 60067

NO 812
 8K MEMORY (MFC)
 SHEET 7 OF 10

SS MASTER
 07/24/77

DRAWN BY: T.L.D.	CHECKED BY: R.L.	LB4-0097-00
DATE DRAWN: 10/16/70	APPROVED BY: J.G.	

MFS CONNECTOR 29				MFS 2ND BK 32				MFS 1ST BK 42			
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
1		2	AB0*	1	MS12*	2	MB12	1	MS02*	2	MB08
3	TH-	4	AB1*	3	MS13*	4	MB13	3	MS03*	4	MB09
5	MC1H*	6	AB2*	5	MS14*	6	MB14	5	MS04*	6	MB10
7		8	AB3*	7		8	MB15	7		8	MB11
9	INHIB	10	AB4*	9	MS15*	10	MB16	9	MS05*	10	MB12
11		12	AB5*	11		12	MB17	11		12	MB13
13	WFO	14	AB6*	13	MS16*	14	MB18	13	MS06*	14	MB14
15	MC1R*	16	AB7*	15		16	MB19	15		16	MB15
17	STROBE	18	AB8*	17	MS17*	18	MB20	17	MS07*	18	MB16
19		20	AB9*	19		20	MB21	19		20	MB17
21		22	AB10*	21	MS18*	22	MB22	21	MS08*	22	MB18
23		24	AB11*	23		24	MB23	23		24	MB19
25		26		25	MS19*	26	MB24	25	MS09*	26	MB20
27		28		27		28	MB25	27		28	MB21
29		30		29	MS20*	30	MB26	29	MS10*	30	MB22
31		32		31		32	MB27	31		32	MB23
33		34		33	MS21*	34	MB28	33	MS11*	34	MB24
35		36		35		36	MB29	35		36	MB25
37		38		37	MS22*	38	MB30	37	MS12*	38	MB26
39		40		39		40	MB31	39		40	MB27
41		42		41	MS23*	42	MB32	41	MS13*	42	MB28
43		44		43		44	MB33	43		44	MB29
45		46		45	MS24*	46	MB34	45	MS14*	46	MB30
47		48		47		48	MB35	47		48	MB31
49		50		49	ADDF1*	50		49	ADDF1*	50	
51		52		51	ADDF2	52		51	ADDF2	52	
53		54		53	INHIB	54	STROBE	53	INHIBIT	54	STROBE
55	GND	56	GND	55	GND	56	GND	55	GND	56	GND
57	+5V	58	+5V	57	+5V	58	+5V	57	+5	58	+5
59	-V	60	-V	59	-V	60	-V	59	-V	60	-V

MFC CONNECTOR 130			
PIN	SIGNAL	PIN	SIGNAL
1		2	GND02
3		4	PSV04
5		6	INDFF
7		8	I06B
9		10	I07B
11		12	I08B
13		14	JMP*
15		16	JPS*
17		18	P00B
19		20	P01B
21		22	EP1
23		24	BP2B
25		26	EP2*
27		28	EP3*
29		30	OUT0*
31		32	OUT1*
33		34	OUT2*
35		36	OUT3*
37		38	OUT4*
39		40	OUT5*
41		42	OUT6*
43		44	OUT7*
45		46	OUT8*
47		48	OUT9*
49		50	OUT10*
51		52	OUT11*
53		54	LOPR
55		56	CSEF*
57		58	INTFF*
59		60	EPB
61		62	P0P2*
63		64	CPPU*
65		66	ADDF1
67		68	ADDF2
69		70	ADDF3
71		72	ADDF4
73		74	SMF1*
75		76	SMF2*
77		78	BPS*
79		80	BPS*
81		82	THJUS
83		84	PSV04
85		86	GND04

BPS2	(584)	MFST2	(544)
	(582)		(541)
	(6A1)		(6B1)
	(6B1)		(6B4)
	(7A1)		
BPS2	(584)	MF0	(6A2)
	(582)		(6B2)
	(6A2)		(6B3)
	(6B3)		(7B3)
	(6B4)		
EQPS	(6A3)	MF1	(6A3)
	(6A1)		(6B2)
	(6B3)		(6B3)
	(7A1)		(7A3)
LOPR	(7B1)	RGCLK	(7A1)
	(6A4)		(6A4)
	(6B1)		(6B1)
	(6B1)		(6B1)
	(6B3)		(7A4)
	(6B3)		
		THJUS	(7A3)
			(6A2)
			(6B2)
			(6B3)

MFC CONNECTOR 130				MFC CONNECTOR 130				MFC CONNECTOR 130			
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
1		A		1		A		1		A	
2		B		2		B		2		B	
3	Y5W	C	Y5A	3	I23	C	I23*	3	I11	C	I11*
4	Y5T	D	Y5S	4	I22	D	I22*	4	I10	D	I10*
5	Y5Z	E	Y56	5	I21	E	I21*	5	I09	E	I09*
6	Y53	F	Y57	6	I20	F	I20*	6	I08	F	I08*
7	Y4A	H	Y6A	7	I19	H	I19*	7	I07	H	I07*
8	Y4C	J	Y6C	8	I18	J	I18*	8	I06	J	I06*
9	Y5A	K	Y7A	9	S23*	K	S23	9	S11*	K	S11
10	Y5C	L	Y7C	10	S22*	L	S22	10	S10*	L	S10
11	Y1C	M	Y3C	11	S21*	M	S21	11	S09*	M	S09
12	Y1A	N	Y3A	12	S20*	N	S20	12	S08*	N	S08
13	Y2A	P	Y2C	13	S19*	P	S19	13	S07*	P	S07
14	Y2B	R	Y2A	14	S18*	R	S18	14	S06*	R	S06
15	Y2A	S	Y2A	15	S17*	S	S17	15	S05*	S	S05
16	Y2C	T	Y2C	16	S16*	T	S16	16	S04*	T	S04
17	X1A	U	X3A	17	S15*	U	S15	17	S03*	U	S03
18	X1C	V	X3C	18	S14*	V	S14	18	S02*	V	S02
19	X5C	W	X7C	19	S13*	W	S13	19	S01*	W	S01
20	X5A	X	X7A	20	S12*	X	S12	20	S00*	X	S00
21	X4C	Y	X6C	21	I17*	Y	I17	21	I05*	Y	I05
22	X4A	Z	X6A	22	I16*	Z	I16	22	I04*	Z	I04
23	X5S	AA	X5Z	23	I15*	AA	I15	23	I03*	AA	I03
24	X5Z	BB	X56	24	I14*	BB	I14	24	I02*	BB	I02
25	X5T	CC	X5S	25	I13*	CC	I13	25	I01*	CC	I01
26	X5Z	DD	X5A	26	I12*	DD	I12	26	I00*	DD	I00
27		EE		27		EE		27		EE	
28		FF		28		FF		28		FF	

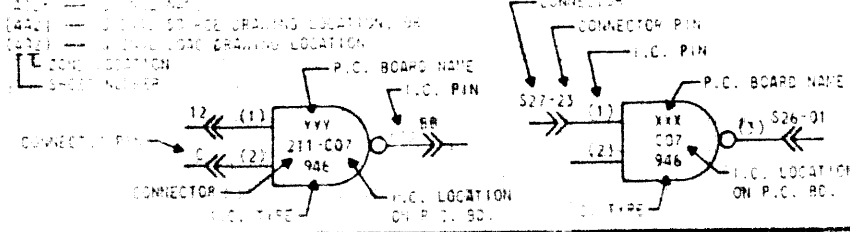
1268	4-12-70
1119	7-1-70
570	
	REVISIONS

NOTES:

- ALL DIODES ARE 1N4148 OR EQUIVALENT, EXCEPT AS NOTED.
- ALL RESISTORS ARE 1/4W, 5%, EXCEPT AS NOTED.
- ALL CAPACITORS ARE pF, EXCEPT AS NOTED.
- I.C. VOLTAGES, EXCEPT AS NOTED:
 - 14 PIN DIP, PIN (7) GND, PIN (14) +5V
 - 16 PIN DIP, PIN (8) GND, PIN (16) +5V
 - 24 PIN DIP, PIN (12) GND, PIN (24) +5V

THE FOLLOWING SYMBOLS/NOTATION ARE USED ON THE DRAWING AND/OR PRINTED CIRCUIT BOARD ASSEMBLY:

- IC - INTEGRATED CIRCUIT
- Q - TRANSISTOR
- () - IC PIN DESIGNATION
- CONN - CONNECTOR DESIGNATION
- NC - NO CONNECTION
- SAT - SELECT AT TEST
- (P1) - PRECISION RESISTORS 100PPM
- 1/8W, 5% METAL FILM
- DC COMMON
- FERRITE BEAD
- GERMANIUM DIODE
- SILICON DIODE
- ZENER DIODE
- TUNNEL DIODE
- SELENIUM DIODE

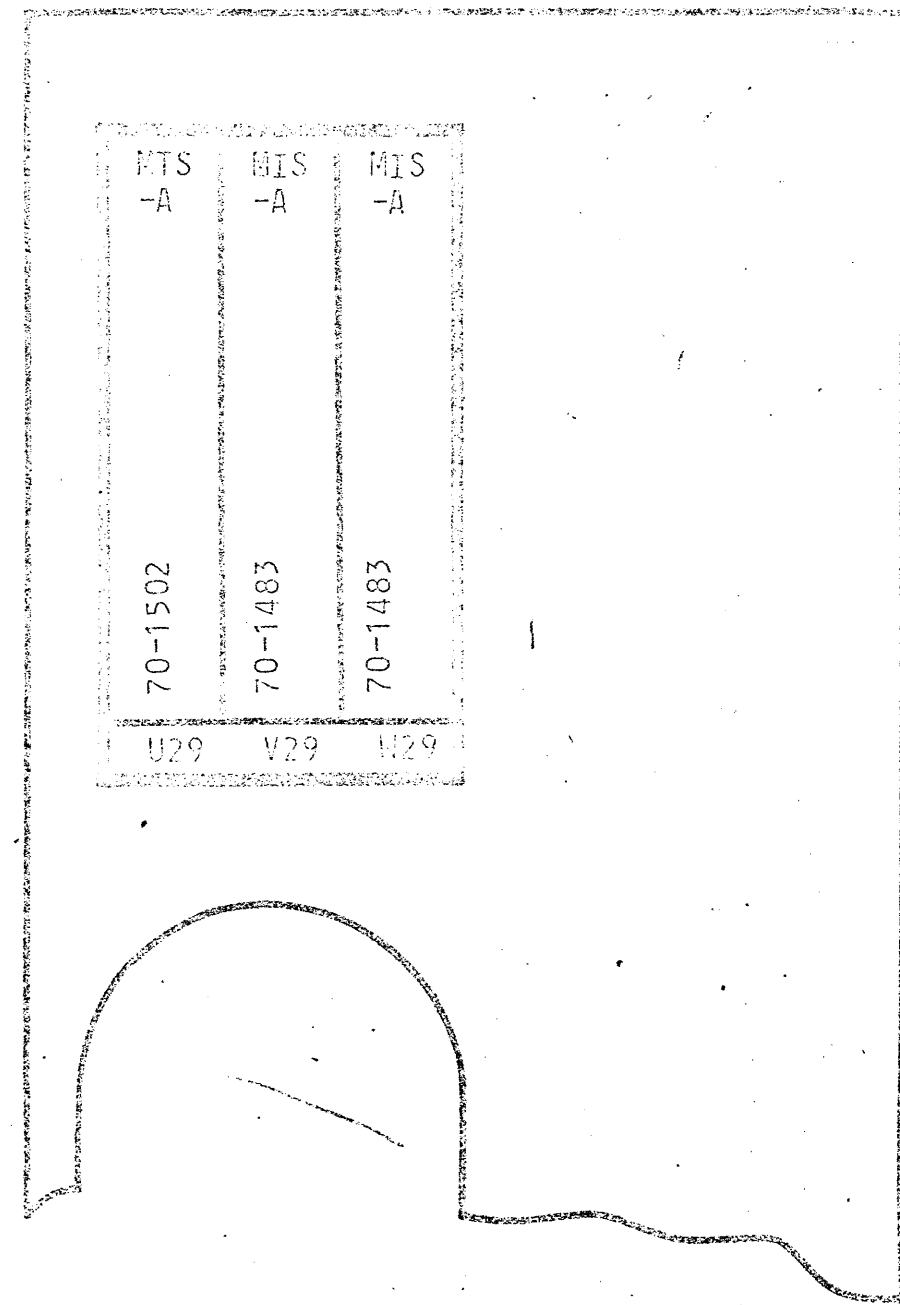


NUCLEAR DATA INC
POST OFFICE BOX 451 PALATINE ILLINOIS 60067

NO-812
BK MEMORY CONNECTORS

DRAWN BY: T.L.D. CHECKED BY: R.C.L. SHEET 2 OF 4
DATE: 4-10-70

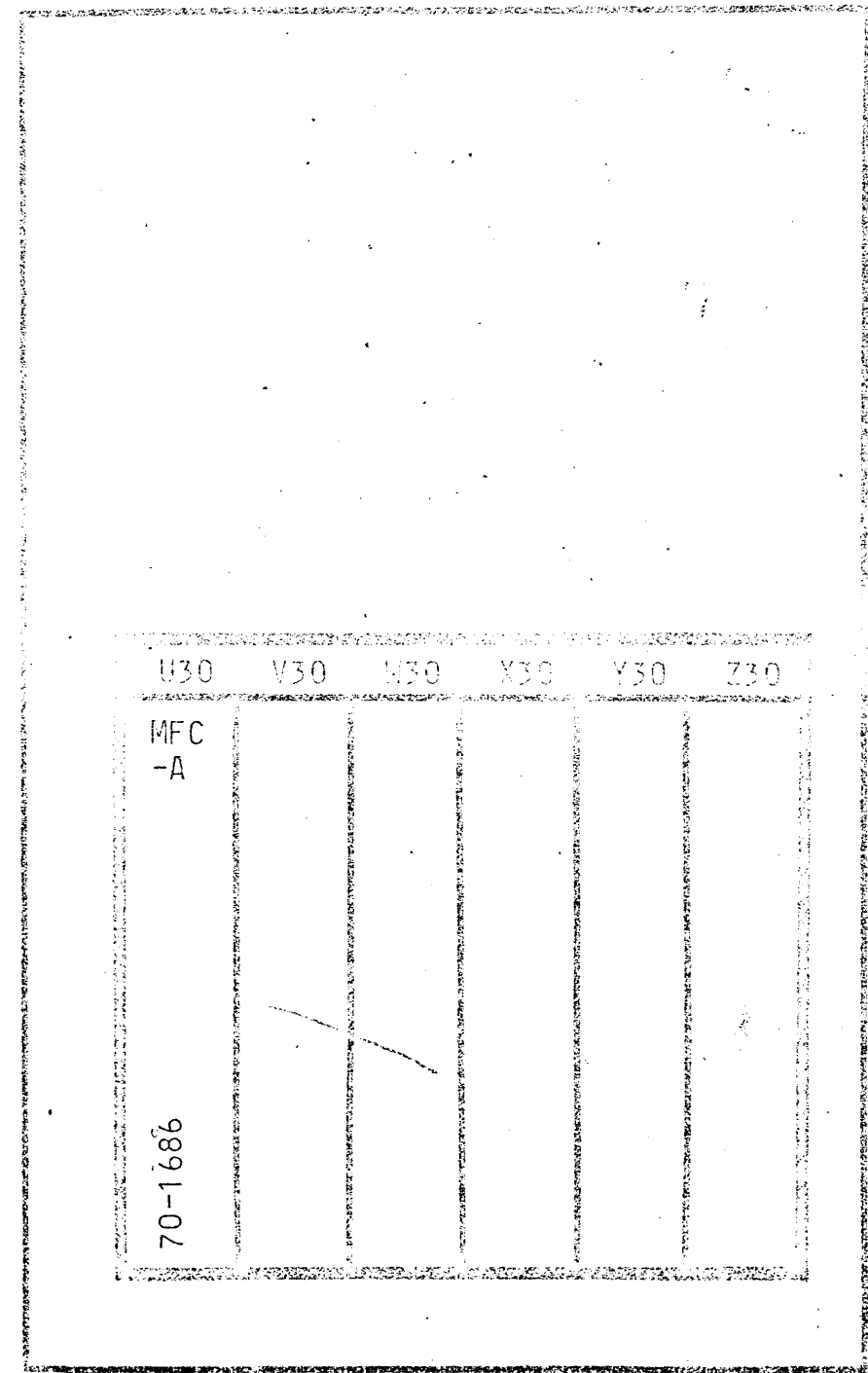
FRONT VIEW



L84-0097-00 (SH 9)

Figure 7-4. ND812 8K Memory, Loading Diagram (Sheet 9 of 10)

FRONT VIEW



L84-0097-00 (SH 10)

Figure 7-4. ND812 8K Memory, Loading Diagram (Sheet 10 of 10)