

REV	CHANGE	ER NO.	DFTS	CHECK	APPD	DATE						
A	RELEASED TO PRODUCTION	35-05402										
	ADDED ITEM 52. ITEM 2 WAS 315-0522331, ITEM 49 WAS 007-8953102, ITEM 51 WAS 007-9502000.	35-07671	FR 4-19-74	WNC 5-9-74	RFS	5-13-74						
C	P5: MOVED +END OF C43 TO J11-7 P4: ITEM 50 WAS 580 Pf	46-03126	BD			9/30/74						
<table border="1"> <tr><td>M05-01-721</td></tr> <tr><td>M05-01-754</td></tr> <tr><td>M05-01-734</td></tr> <tr><td>M05-01-399</td></tr> <tr><td>M05-01-STD</td></tr> <tr><td>MODULE</td></tr> </table>							M05-01-721	M05-01-754	M05-01-734	M05-01-399	M05-01-STD	MODULE
M05-01-721												
M05-01-754												
M05-01-734												
M05-01-399												
M05-01-STD												
MODULE												
MO			RFC NO.		PLANT LOC	DESCRIPTION						
MANUFACTURING OPTION FOR USE ONLY AT PLANT SHOWN												
INTERPLANT USAGE (CODE)			1	315-0524791								
REPLACES DWG			315-0524792									
THIS DRAWING AND ANY ATTACHMENTS THERETO AND INFORMATION THEREON ARE THE PROPERTY OF THE NATIONAL CASH REGISTER COMPANY AND ALL UNAUTHORIZED USE AND REPRODUCTION IS PROHIBITED.			NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA									
CLASS	MODEL	PLANT	CLASS	MODEL	PLANT	CLASS: M05						
M05	01	08				UNIT: GPMC						
START: 4-25-73		FINISH: 4-26-73		NAME: BOARD-PLUGIN, PROCESSOR 3								
DFTS: M. BEAS												
DRAWING OF THE ASSEMBLY			CHKR: <i>Matt</i> / 5-1-73		REV							
SHEET NO. 585			DESIGNER: T. HAYWOOD		315-0528406							
REV	A	B	C	APPD:	APPD:	CODE: 2-9045						
COVER SHEET			SHEET 1 OF 6									

ITEM	REQD	SIZE	PART NO.	DESCRIPTION	PARTS LIST CHG. ER NO.	REMARKS
1	1	D	315-0525495	BOARD-PRINTED	35-07671	P3
2	1	D	315-0529100	STIFFENER		
3	1	B	315-0523289	TAB-IDENTIFICATION		
4	1	D	315-0523126	LABEL		
5	8	D	315-0522589	BUS BAR		
6	2	D	315-0520637	BUS BAR		
7	2	D	315-0520639	BUS BAR		
8	REF	D	315-0528409	SCHEMATIC-LOGIC		
9	REF	A	007-9999147	PERFORMANCE SPECIFICATION		
10	REF	A	007-9506300	ASSEMBLY SPECIFICATION		
11	5	A	007-6951204	RIVET-HOLLOW BRASS		
12	2	A	006-6020448	RESISTOR-100 Ω , $\frac{1}{4}W$, $\pm 5\%$ R9, 11		
13	1	A	006-6020483	RESISTOR-560 Ω , $\frac{1}{4}W$, $\pm 5\%$ R2		
14	6	A	006-6020401	RESISTOR-300 Ω , $\frac{1}{4}W$, $\pm 5\%$ R1, 3, 4, 6, 8, 10		
15	2	A	006-6020402	RESISTOR-1K, $\frac{1}{4}W$, $\pm 5\%$ R5, 7		
16	31	A	007-1158901	CAPACITOR-12UF, 6V +100%, -20% C12, 13, 14, 15, 16, 17, 18, 19 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42		
17	1	A	007-1699401	CIRCUIT-TTL, NAND GATE (QUAD 2-INPUT OC) A8		
18	1	A	007-1696201	CIRCUIT-TTL, NOR GATE (QUAD 2-INPUT) B6		
19	12	A	007-1695001	CIRCUIT-TTL, NAND GATE (QUAD 2-INPUT) A7, C1, C4, C5, C8, D4, D5, E5, F5, G5, H5, J3		
20	15	A	007-1695901	CIRCUIT-TTL, NAND GATE (TRIPLE 3-INPUT) A4, A6, B4, C2, C7, D7, E7, F4, F7, F8, G7, H1, H2, H7, J2		
21	5	A	007-1695401	CIRCUIT-TTL, FLIP-FLOP (DUAL) D1, J4, J5, J6, J7		
NCR			UNIT: GPMC	315-0528406		
			NAME: BOARD-PLUGIN, PROCESSOR 3	REV C		
			NCR PROPRIETARY	PARTS LIST	SHEET 2	OF 6

ITEM	REQD	SIZE	PART NO.	DESCRIPTION	PARTS LIST CHG. ER NO.	REMARKS
22	1	A	007-1677001	CIRCUIT-TTL, 256 BIT ROM A9		
23	1	A	007-1677002	CIRCUIT-TTL, 256 BIT ROM B9		
24	1	A	007-1677003	CIRCUIT-TTL, 256 BIT ROM C9		
25	1	A	007-1677004	CIRCUIT-TTL, 256 BIT ROM D9		
26	1	A	007-1677005	CIRCUIT-TTL, 256 BIT ROM E9		
27	1	A	007-1677006	CIRCUIT-TTL, 256 BIT ROM F9		
28	1	A	007-1677007	CIRCUIT-TTL, 256 BIT ROM G9		
29	1	A	007-1677008	CIRCUIT-TTL, 256 BIT ROM H9		
30	1	A	007-1677009	CIRCUIT-TTL, 256 BIT ROM J9		
31	1	A	007-1677010	CIRCUIT-TTL, 256 BIT ROM K9		
32	1	A	007-1677011	CIRCUIT-TTL, 256 BIT ROM A10		
33	1	A	007-1677012	CIRCUIT-TTL, 256 BIT ROM B10		
34	1	A	007-1677013	CIRCUIT-TTL, 256 BIT ROM C10		
35	1	A	007-1677014	CIRCUIT-TTL, 256 BIT ROM D10		
36	1	A	007-1677015	CIRCUIT-TTL, 256 BIT ROM E10		
37	1	A	007-1677016	CIRCUIT-TTL, 256 BIT ROM F10		
38	1	A	007-1677017	CIRCUIT-TTL, 256 BIT ROM G10		
39	1	A	007-1677018	CIRCUIT-TTL, 256 BIT ROM H10		
40	1	A	007-1677019	CIRCUIT-TTL, 256 BIT ROM J10		
41	1	A	007-1677020	CIRCUIT-TTL, 256 BIT ROM K10		
42	1	A	007-1677031	CIRCUIT-TTL, 256 BIT ROM F1		
43	1	A	007-1677032	CIRCUIT-TTL, 256 BIT ROM F3		

NCR	UNIT: GPMC	315-0528406	REV
	NAME: BOARD-PLUGIN, PROCESSOR 3		C
NCR PROPRIETARY		PARTS LIST	SHEET 3 OF 6

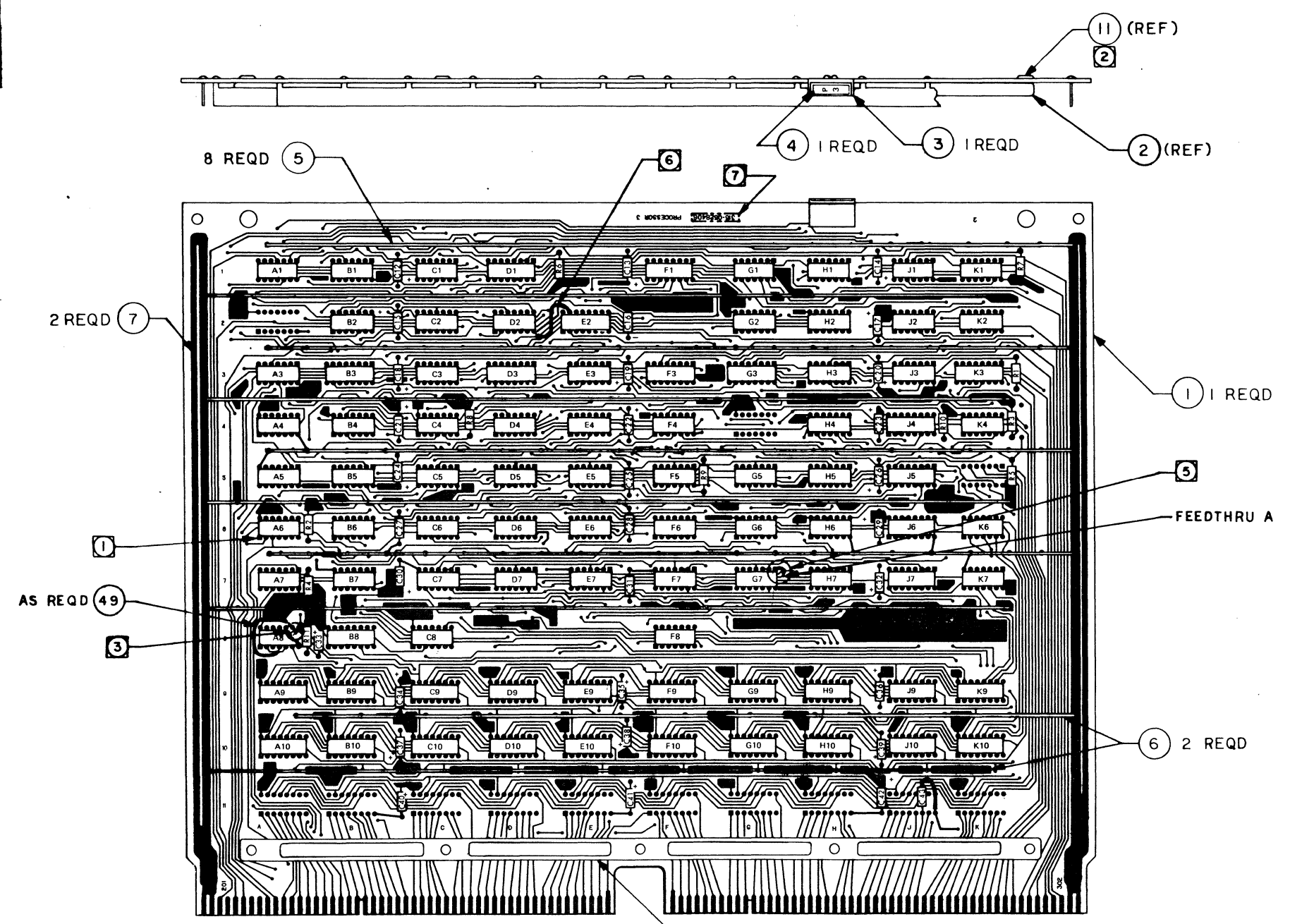
ITEM	REQD	SIZE	PART NO.	DESCRIPTION	PARTS LIST CHG. ER NO.	REMARKS
44	4	A	007-1697101	CIRCUIT-TTL SHIFT REG (4-BIT) B3, D3, G3, K3		
45	2	A	007-1698001	CIRCUIT-TTL, MULTIPLEXER (QUAD 2-INPUT) B8, E2		
46	11	A	007-1695301	CIRCUIT-TTL, HEX INVERTER A1, A3, C3, D2, E4, G2, H4, K2, K4, K6, K7		
47	9	A	007-1695201	CIRCUIT-TTL, NAND GATE (SINGLE 8-INPUT) B5, B7, C6, D6, E6, F6, G6, H3, H6		
48	7	A	007-1695101	CIRCUIT-TTL, NAND GATE (DUAL 4-INPUT) A5, B1, B2, E3, G1, J1, K1		
49	A/R	A	007-9000001	WIRE-ELECTRICAL, INSULATED W1, W2, W3	35-07671	
50	1	A	007-1131526	CAPACITOR-680PF, 100V, ±20% C43	46-03126	
51	REF	A	007-9502002	MARKING, GENERAL	35-07671	
52	1	C	315-0529089	INSULATOR-CARD STIFFENER	35-07671	

NCR	UNIT: GPMC	315-0528406	REV
	NAME: BOARD-PLUGIN, PROCESSOR 3		C
NCR PROPRIETARY		PARTS LIST	SHEET 4 OF 6

(25.4)mm
1 INCH

④ WIRE LIST					
REF DES	START TERM	END TERM	P/L ITEM	COMP SIDE	SLD SIDE
W1	G7-1	FEEDTHRU A	49	X	
W2	A8-4	A8-9	49	X	
W3	D2-7	E2-15	49	X	

CONDUCTOR CUT LIST ③				
CUT NO.	CUT BETWEEN		COMP SIDE	SLD SIDE
1	A8-4	A8-8	X	
2	G7-1	FEEDTHRU A		X



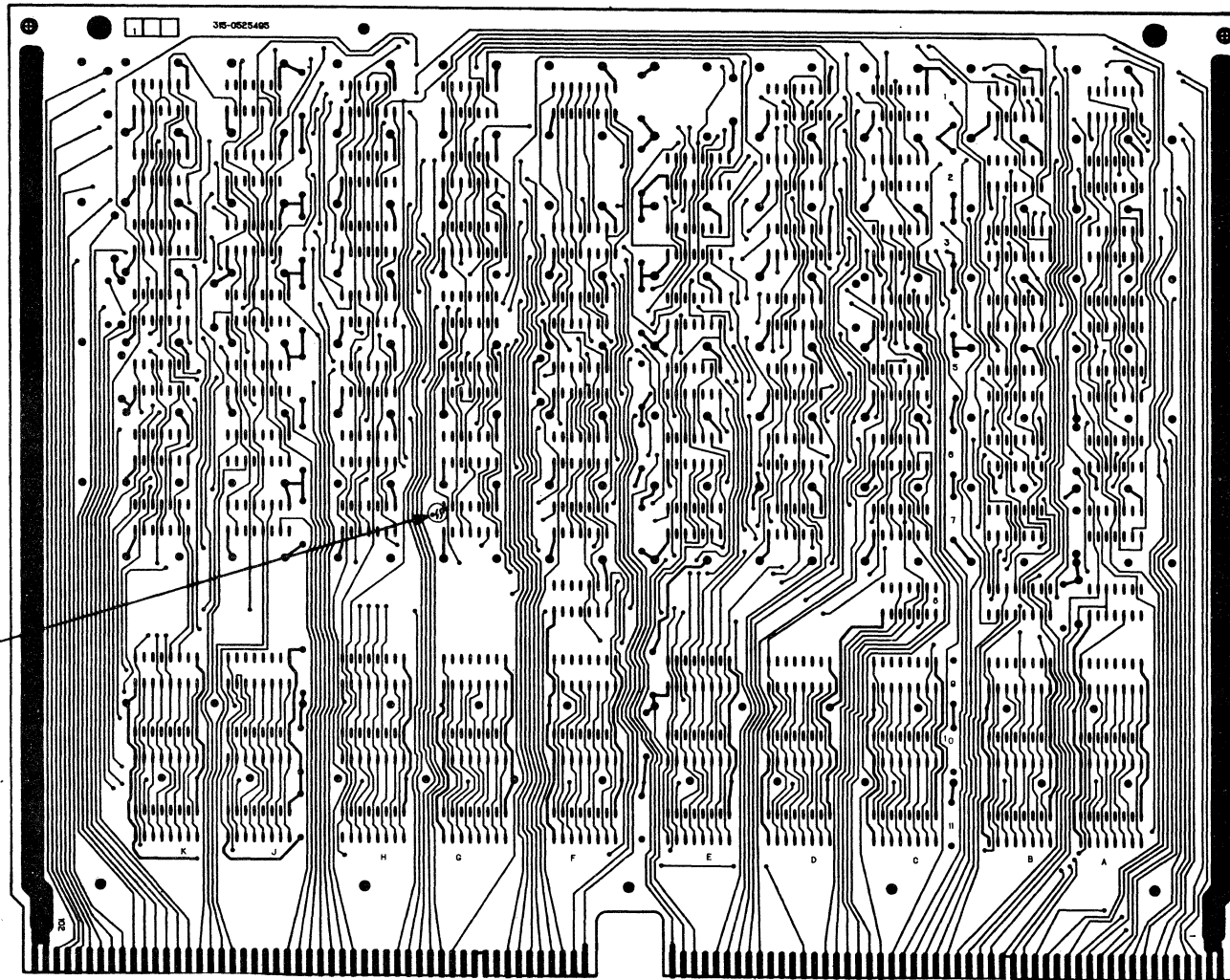
- ⑦ RE-IDENTIFY PER ITEM 51.
 - ⑥ LIFT PIN E2-15 FROM PAD AND SOLDER ITEM 49 (WIRE W3) FROM PIN E2-15 TO PIN D2-7.
 - ⑤ LIFT G7-1 PIN FROM PAD AND SOLDER G7-1 PIN (W1) TO FEEDTHRU A.
 - ④ ROUTE JUMPERS (WIRE)/COMPONENTS APPROXIMATELY AS SHOWN, PER ITEM 10.
 - ③ CUT CONDUCTOR APPROX AS SHOWN, PER ITEM 10.
 - ② INSTALL FROM THIS SIDE.
 - ① ■ INDICATES PIN NUMBER 1.
- NOTES (UNLESS OTHERWISE SPECIFIED)

315-0528406

REV C	SEE SHEET ONE FOR CHANGES
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NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA	
UNIT: GPMC	NAME: BOARD-PLUGIN, PROCESSOR 3
SHEET 5 OF 6	DWG SIZE 315-0528406
SCALE: 1:1	D

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
INCH NOMINAL
.XX ±
.XXX ±

(25.4MM)
1 INCH



315-0528406

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NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA	
UNIT: GPMC	NAME: BOARD-PLUGIN, PROCESSOR 3
SHEET 6 OF 6	DWG SIZE
SCALE: 1:1	D 315-0528406

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
 INCH NOMINAL
 .XX ±
 .XXX ±

NOTES (UNLESS OTHERWISE SPECIFIED)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
CCR01-A		206	3-E9	
CCR02-A		4	3-E9	
CCR03-A		6	3-E10	
CCR04		59	3-E3	
CCR05		8	3-E3	
CCR06		299	3-E4	
CCR07		30	3-E4	
CCR08		203	3-E4	
CCR08		298	3-E5	
CCR09		98	3-E5	
CCR09-A		205	3-E10	
CCR10		91	3-E5	
CCR11		68	3-E6	
CCR12		74	3-E6	
CDS02		58	4-A7	
CL1-A	85		5-B4,5-B1Q,5-C9 5-E1,5-E2,5-E4 5-E6,5-E8,E-10	
CL2-B	51		3-G11	
COM	65		5-C9	
DRS	69		5-C6	
EHS	56		5-G7	
ET	55		3-D3,5-G7	
ET		18	3-D2	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
HS	90		3-E10	
IR	96		3-D8	
J01	210		3-G2	
J02	10		3-G2	
J03	9		3-G2	
J04	209		3-G2	
J05	53		3-G4	
J06	89		3-G4	
J07	52		3-G4	
J08	7		3-G4	
J09	95		3-G6	
J10	291		3-G6	
J11	296		3-G6	
J12	67		3-G6	
J13	94		3-G8	
J14	294		3-G8	
J15	293		3-G8	
J16	92		3-G8	
KA	45		3-D7,3-D11	
KAT	300		3-D10	
KB	34		3-D6,3-F10	
KCCR01		292	4-D3	
KCCR02		54	4-D4	
KCCR05		49	4-D5	
KCCR06		29	4-D6	
KCCR07		76	4-D6	
KCCR08		297	4-D7	
KCCR09		44	4-A3	
KCCR10		295	4-A3	
KCCR11		75	4-A4	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
KCCR12		3	4-A4	
KCCR14		11	4-A5	
KCCR17		88	4-A7	
KCCR24	47		5-E4	
KKB	28		3-F10	
KN11	32		5-E2	
KN12	46		5-E3	
KTT	36		3-D5	
KTTF	13		3-D9,3-D11	
KXS01	33		5-G2,5-G4,5-G6 5-G8,5-G9,5-G11	
KXS04	50		3-D5	
KXS07	14		3-D9	
MC	93		3-G9	
MDR13	27		4-F7	
MDR14	24		4-F8	
MDR15	26		4-F8	
MDR16	25		3-D8,4-F8, 5-B7	
MR	100		5-C6,5-C8, 5-B5	
N1		84	5-D1	
N2		79	5-D2	
N3		86	5-D4	
N4		87	5-D6	
N5		78	5-D7	
N6		77	5-D9	
N7		64	5-A10	
PINT	37		3-D6	
RCOM	12		5-B8	

315-0528409

3 THESE CIRCUITS ARE SPARE ROM POSITIONS AND SHOWN FOR REFERENCE PURPOSES ONLY.

2. +5 VOLT PINS 1, 2, 201, 202.

1. GROUND PINS 101, 102, 301, 302.

CHANGES: **A** RELEASED TO PRODUCTION.

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CLASS: M05 UNIT: GPMC
 START: 3-29-73 FINISH: 3-30-73 NAME: SCHEMATIC-LOGIC, PROCESSOR 3
 DPTS: J. DEY
 CHKR: J. BOONE
 DESIGNER: J. BOONE
 APPD: _____

INTERPLANT USAGE (CODE): _____
 REPLACES DWG: 315-0524795

DATE: _____ CHECK: _____
 SHEET 1 OF 7 DWG SIZE: D
 CODE: N-E

DATA PROCESSING DIVISION
 RANCHO BERNARDO, CALIFORNIA

315-0528409

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FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
RDIR0JT	19		3-D6	
SSE	31		4-F9	
TPGND	22		5-C?	
XA23		233	7-B5	
XA43		253	7-B10	
XA57		267	6-A5	
XA71		281	6-A7	
XAUX17		227	7-B4	
XAUX31		241	7-B7	
XAUX44		254	7-B10	
XAUX49		259	6-A3	
XAUX50		260	6-A3	
XAUX51		261	6-A3	
XAUX52		262	6-A3	
XAUX53		263	6-A3	
XAUX58		268	6-A5	
XAUX67		277	6-A7	
XAUX68		278	6-A7	
XAUX72		282	6-A7	
XAUX75		285	6-A9	
XAUX78		288	6-A9	
XB27		237	7-B6	
XCCR18		228	7-B4	
XCOR15		225	7-B3	
XF01		211	7-B1	
XF02		212	7-B1	
XF03		213	7-B1	
XF04		214	7-B1	
XFL25		235	7-B6	
XFL46		256	7-B10	
XFL79		289	6-A9	
XG05		215	7-A1	

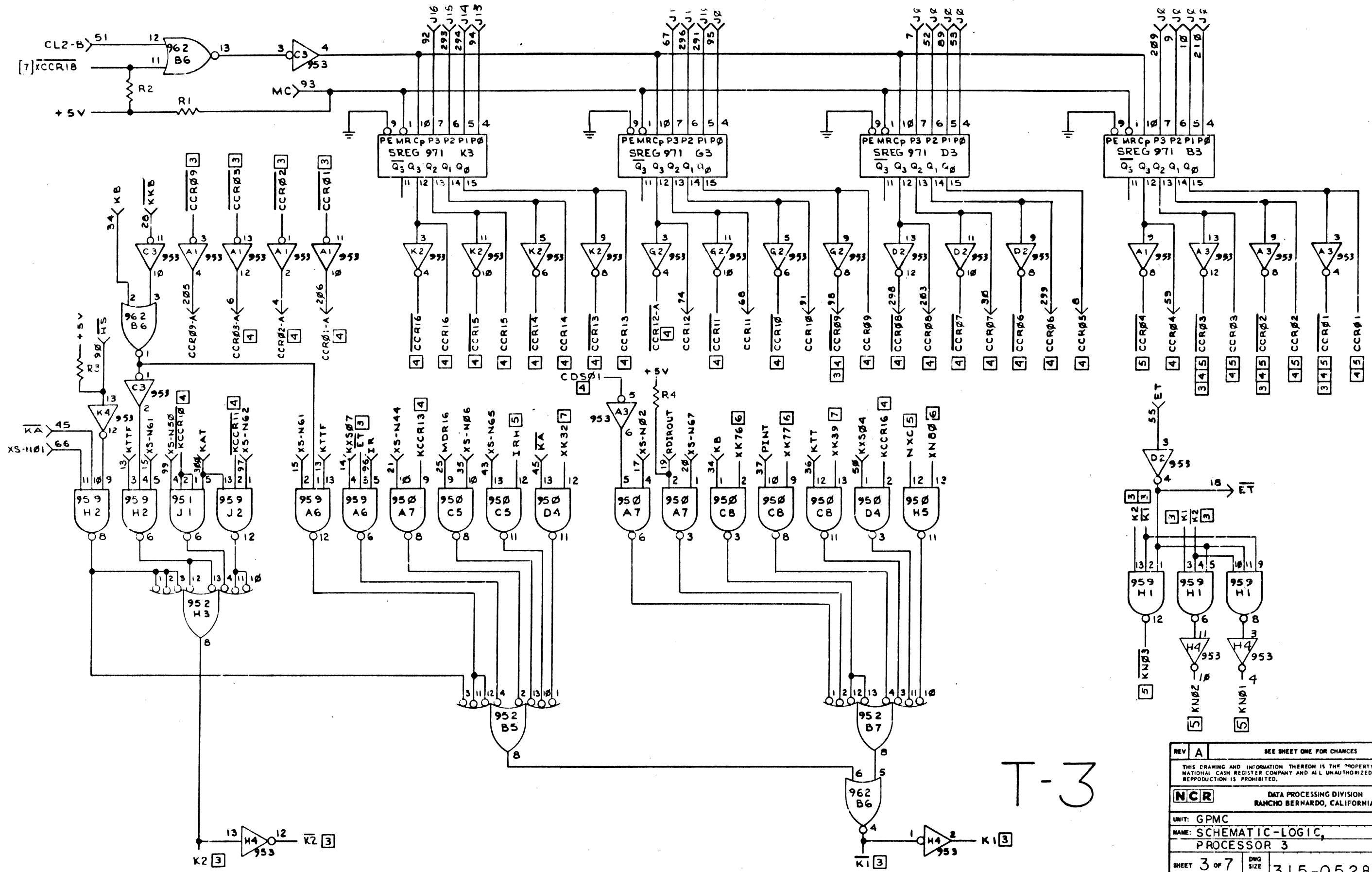
FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
XG06		216	7-A1	
XG07		217	7-A1	
XG08		218	7-A1	
XI065		275	6-A7	
XI066		276	6-A7	
XI070		280	6-A7	
XIP28		238	7-B6	
XJ09		219	7-A2	
XJ10		220	7-A3	
XJ11		221	7-A3	
XJ12		222	7-A3	
XJ13		223	7-A3	
XJ42		252	7-B9	
XJ48		258	7-B10	
XJ54		264	6-A3	
XJ56		266	6-A3	
XJ73		283	6-A9	
XK32		242	7-B7	
XK39		249	7-B8	
XK76		286	6-A9	
XK77		287	6-A9	
XKA30		240	7-B6	
XKB69		279	6-A7	
XMA14		224	7-B3	
XMA55		265	6-A3	
XMCR20		230	7-B5	
XMCR47		257	7-B10	
XMD16		226	7-B3	
XMW22		232	7-B5	
XN33		243	7-B8	
XN34		244	7-B8	
XN35		245	7-B8	
XN36		246	7-B8	
XN37		247	7-B8	
XN38		248	7-B8	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
XN40		250	7-B8	
XN41		251	7-B9	
XN59		269	6-A5	
XN60		270	6-A5	
XN61		271	6-A5	
XN62		272	6-A5	
XN63		273	6-A5	
XN64		274	6-A5	
XN80		290	6-A9	
XS-N00	23		5-B8, 5-C2	
XS-N00	39		7-B7	
XS-N01	66		3-D11, 5-B5	
XS-N02	17		3-D7, 4-F9	
XS-N05	73		5-C5	
XS-N06	35		3-D6, 5-G1, 5-G3, 5-G5, 5-G7, 5-G9, 5-G10	
XS-N07	57		4-D11	
XS-N44	21		3-D8	
XS-N50	99		3-D10	
XS-N61	15		3-D9, 3-D10	
XS-N62	97		3-D9	
XS-N65	43		3-D8	
XS-N67	20		3-D8	
XSR19		229	7-B4	
XSR21		231	7-B5	
XSR29		239	7-B6	
XT24		234	7-B5	
XT26		236	7-B6	
XT45		255	7-B10	
XT74		284	6-A9	

315-0528409

T-2

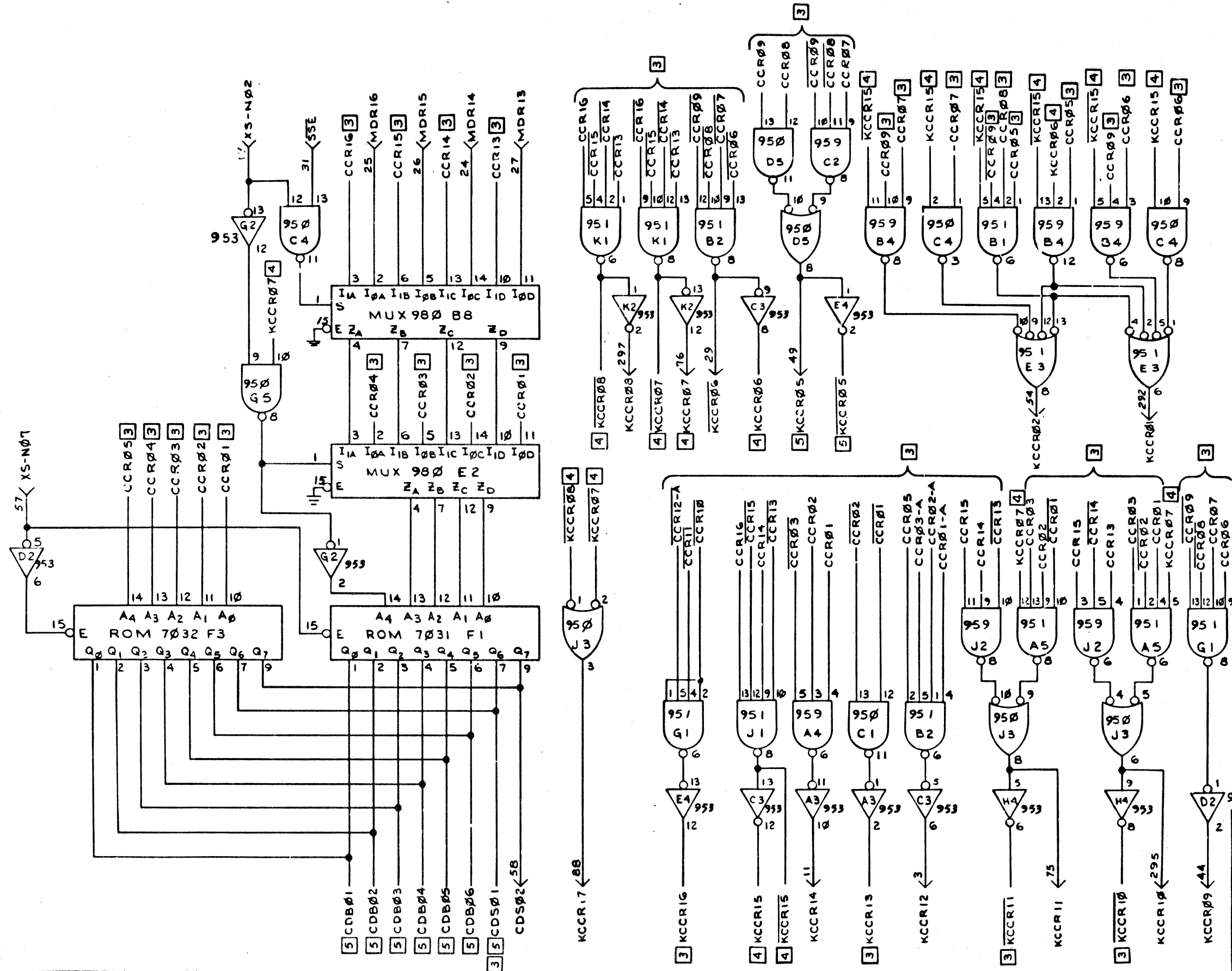
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NCR	DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA
UNIT: GPMC	
NAME: SCHEMATIC-LOGIC, PROCESSOR 3	
SHEET 2 of 7	DWG SIZE 315-0528409



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315-0528409

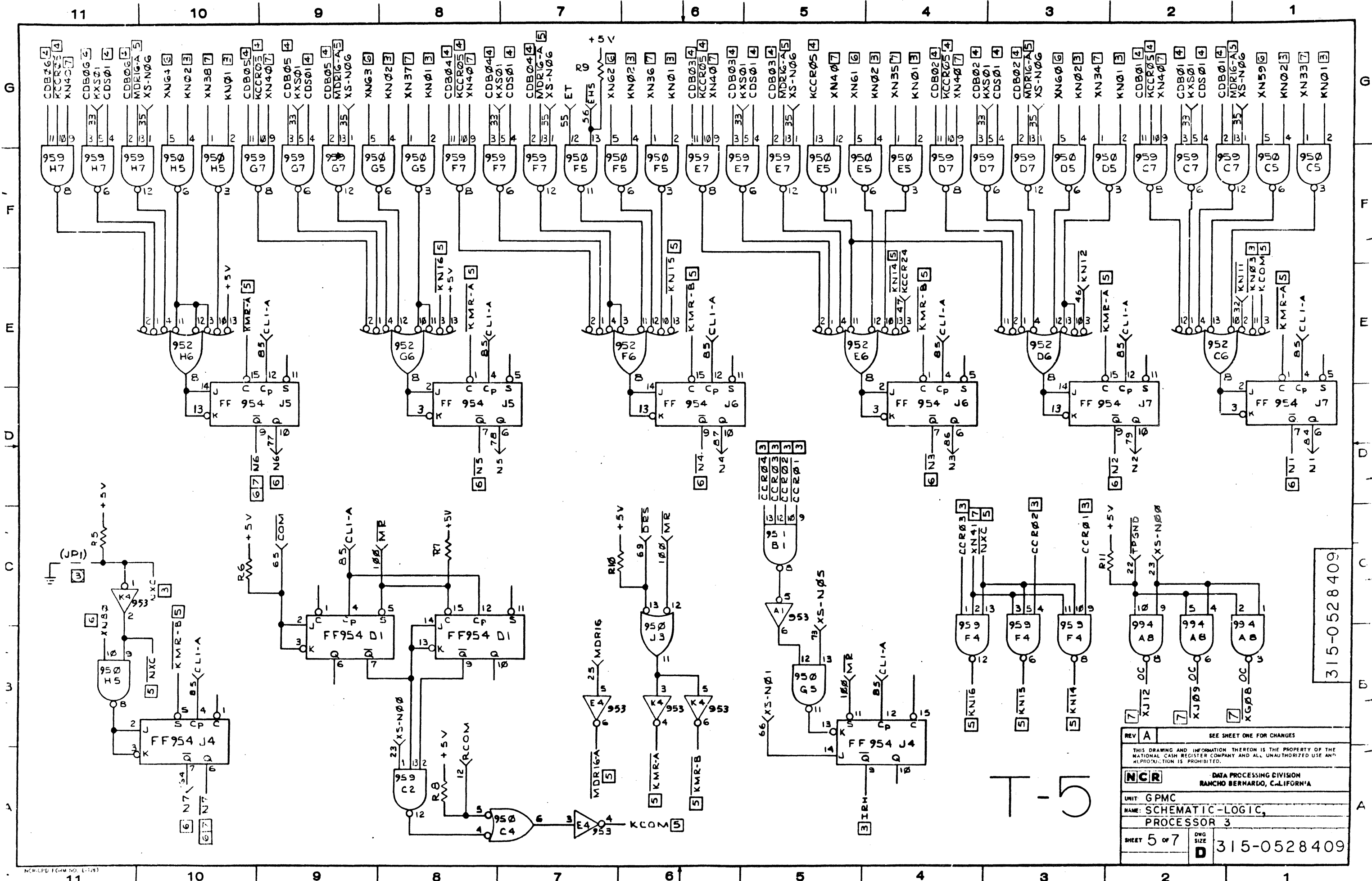
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NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA	
UNIT: GPMC	
NAME: SCHEMATIC-LOGIC, PROCESSOR 3	
SHEET 3 of 7	DWG SIZE 315-0528409



T-4

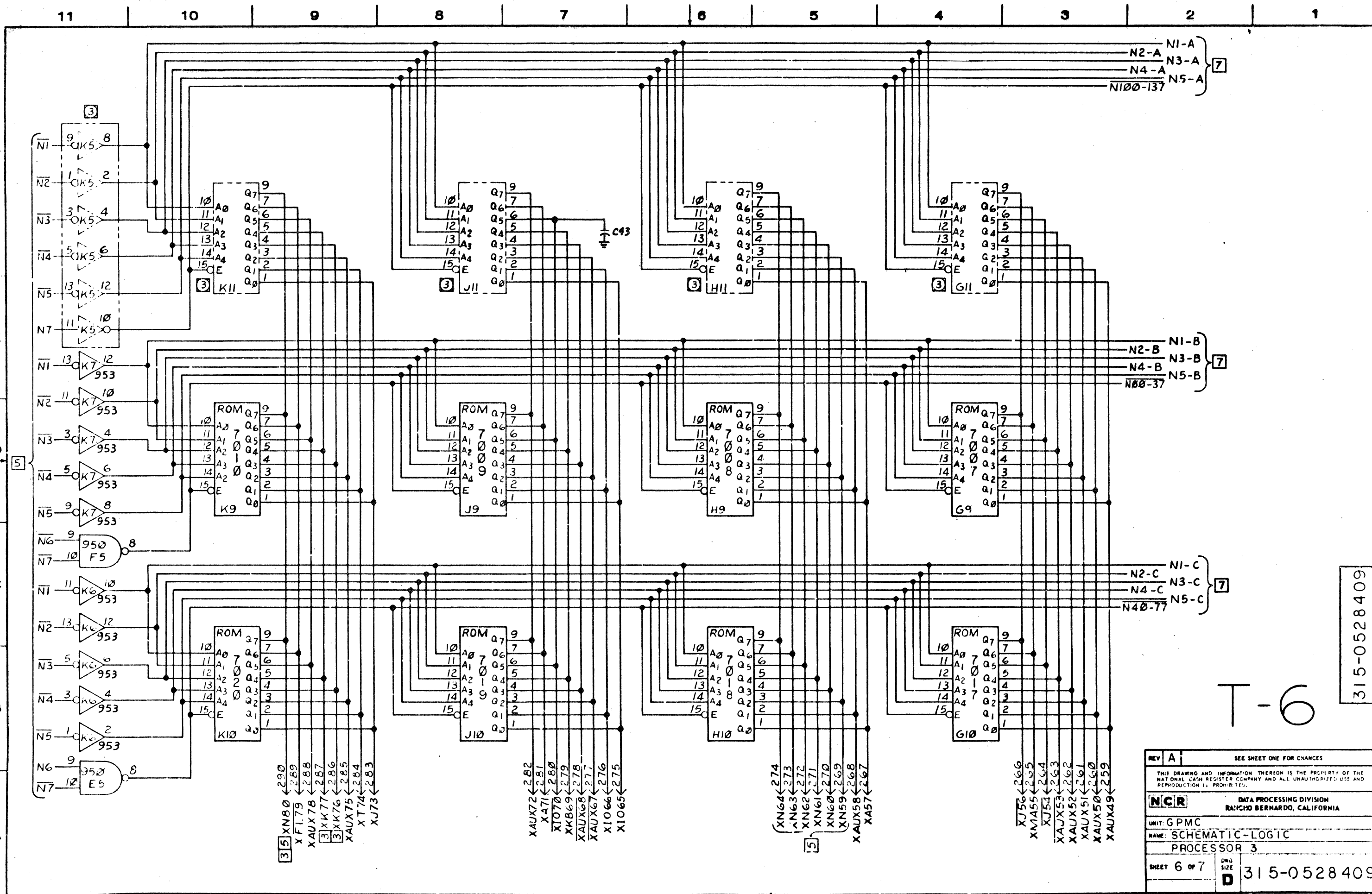
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NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA	
UNIT: GPMC	
NAME: SCHEMATIC-LOGIC, PROCESSOR 3	
SHEET 4 of 7	DWG SIZE D 315-0528409



315-0528409

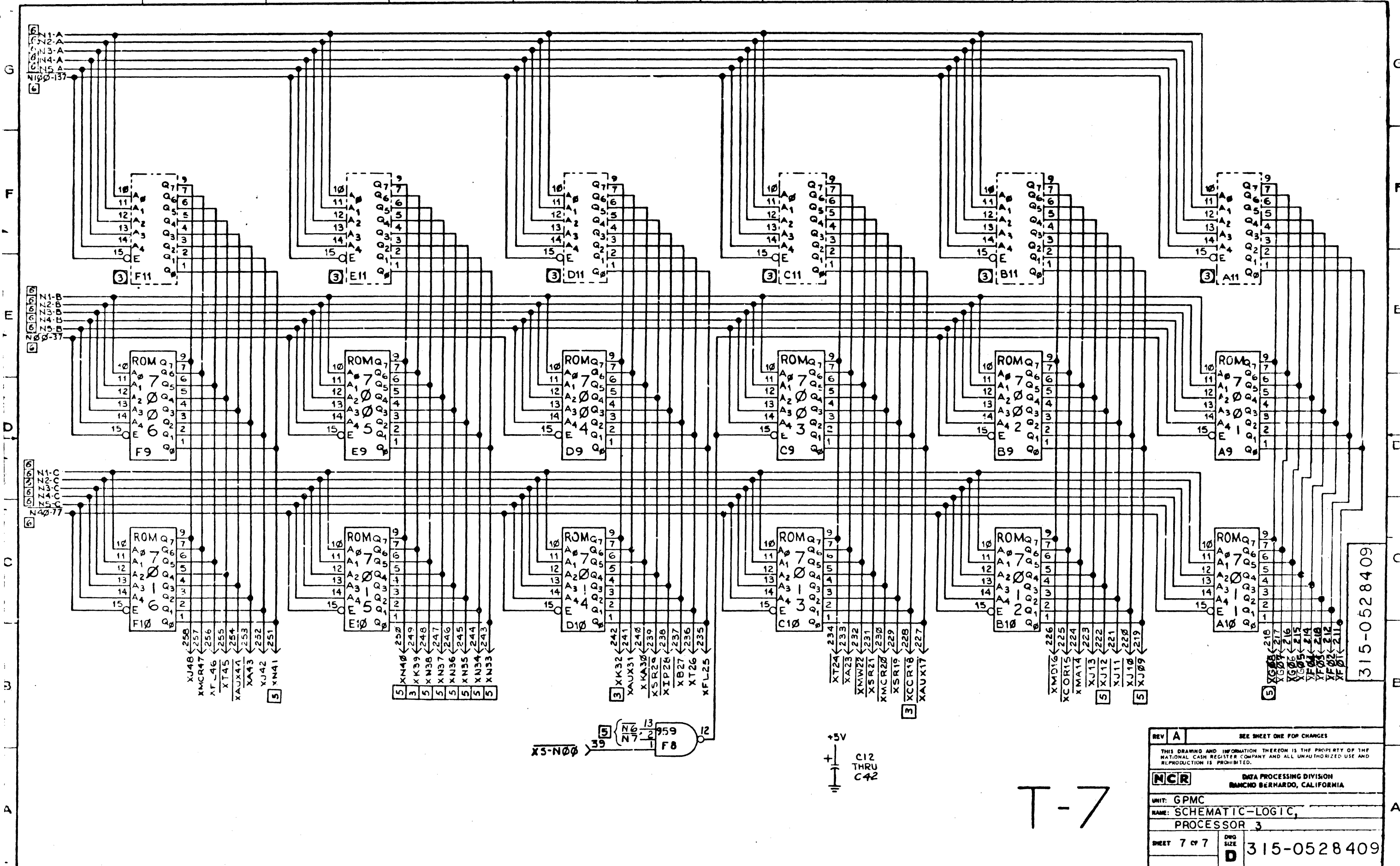
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NCR	DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA
UNIT: GPMC	NAME: SCHEMATIC-LOGIC,
	PROCESSOR 3
SHEET 5 OF 7	DWG SIZE D 315-0528409



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315-0528409

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NCR	DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA
UNIT: GPMC	NAME: SCHEMATIC-LOGIC PROCESSOR 3
SHEET 6 OF 7	DWG SIZE 315-0528409



315-0528409

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NCR DATA PROCESSING DIVISION SAN CLEMENTE, CALIFORNIA	
UNIT: GPMC	
NAME: SCHEMATIC-LOGIC, PROCESSOR 3	
SHEET 7 of 7	DWG SIZE D 315-0528409