


		REVISIONS			12	3	F
LAL	REV.	DESCRIPTION	CHK	DATE	APPROVED		
		SEE RESERVE E.O. RELEASE TO MEMORANDUM REV.	B	3/29/64			
X	F	SEE REV E.O. REVISED & REDRAWING					

124

NO. REQ.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	ITEM NO.
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MATERIAL LIST

NOTES UNLESS SPECIFIED 1. TOLERANCES .XX ±.030 ANGULAR .XXX ±.010 ±1/2° 2. BREAK ALL SHARP EDGES .010 APPROX. 3. MACH. SURFACES ✓ 4. ALL DIM. IN INCHES	DRAWN	L. Naylor	5/26/66	 SANTA MONICA, CALIFORNIA TITLE EQUATION, LOGIC IOP (COVER SHEET)
	CHECK	R. W. Gish	7/6/6	
	APPR.	L. M. Anderson	7/9/6	

MODEL NO. 8471		SIZE A	DWG. NO. 123653 (CHARTED)	CHANGE LETTER F
NEXT ASSY. 117610		SCALE	DO NOT SCALE DRAWING	SHEET 1 OF 2

NOTES:

1. This document consists of the following parts:

-001 Logic Equations sheets 123

-100 Signal Dictionary sheets 28

~~-111 Load List sheets 151 pages~~

TITLE	EQUATION, LOGIC IOP (LAST COVER SHEET)	SDS	
		123653 (CHARTED)	F
		SHEET 2 OF 2	

SDS

SCIENTIFIC DATA SYSTEMS
COSTA MESSICA, CALIFORNIA

124

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L
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123653-100
03710

0000064	10A06P2
0000050	10A08P2
0000054	10A10P2
0000056	10A11P2
0000058	10A12P2
0000060	10A13P2
0000062	10A14P2
0000066	14A13P2
0000068	14A14P2
0000074	14C12P2
0000076	14C13P2
0000078	14C14P2
0023024	1ES/
0000072	32A13P2
0000070	32A14P2
0000200	A0
0000300	NA0
0000350	NA0-1
0000400	A1
0000450	NA1
0000500	A2
0000600	A3
0000700	A4
0000800	NA4
0000900	A5
0001000	NA5
0001100	A6
0001200	NA6
0001300	A7
0001400	NA7
0001600	ADD0
0001700	ADD1
0001800	ADD10
0001900	ADD11
0002000	ADD12
0002100	ADD13
0002200	ADD14
0002300	ADD15
0002400	ADD2
0002500	ADD3
0002600	ADD4
0002700	ADD5
0002800	ADD6
0002900	ADD7
0003000	ADD8
0003100	ADD9
0003200	AH
0003300	NAH
0003250	/AHX/
0003395	/AI9/
0003400	AIGFN

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70

0003500	NAIBFN															
0003600	AR															
0003650	/ARX/															
0003625	/ASC/															
0003615	AV9															
0003610	/AV9/															
0003700	NAXO															
0003800	AXFR															
0003900	NAXFR															
0004000	AXM															
0004100	BAO															
0004134	W/BA007-0/1															
0004114	L/BA007-0/1															
0004135	W/BA007-0/2															
0004115	L/BA007-0/2															
0004136	W/BA007-0/3															
0004116	L/BA007-0/3															
0004137	W/BA007-0/4															
0004117	L/BA007-0/4															
0004138	W/BA007-0/5															
0004118	L/BA007-0/5															
0004139	W/BA007-0/6															
0004140	W/BA007-0/7															
0004141	W/BA007-0/8															
0004110	K/BA007-01															
0004111	K/BA007-1/															
0004142	W/BA007-1/1															
0004119	L/BA007-1/1															
0004143	W/BA007-1/2															
0004120	L/BA007-1/2															
0004144	W/BA007-1/3															
0004121	L/BA007-1/3															
0004145	W/BA007-1/4															
0004122	L/BA007-1/4															
0004146	W/BA007-1/5															
0004123	L/BA007-1/5															
0004147	W/BA007-1/6															
0004148	W/BA007-1/7															
0004149	W/BA007-1/8															
0004112	K/BA007-2/															
0004150	W/BA007-2/1															
0004124	L/BA007-2/1															
0004151	W/BA007-2/2															
0004125	L/BA007-2/2															
0004152	W/BA007-2/3															
0004126	L/BA007-2/3															
0004153	W/BA007-2/4															
0004127	L/BA007-2/4															
0004154	W/BA007-2/5															
0004128	L/BA007-2/5															
0004155	W/BA007-2/6															

REMARKS 123633-100
03/10/76

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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0004156 W/BA007-2/7
 0004157 W/BA007-2/8
 0004113 K/BA007-3/
 0004158 W/BA007-3/1
 0004129 L/BA007-3/1
 0004159 W/BA007-3/2
 0004130 L/BA007-3/2
 0004160 W/BA007-3/3
 0004131 L/BA007-3/3
 0004161 W/BA007-3/4
 0004132 L/BA007-3/4
 0004162 W/BA007-3/5
 0004133 L/BA007-3/5
 0004163 W/BA007-3/6
 0004164 W/BA007-3/7
 0004165 W/BA007-3/8
 0004200 BA1
 0004300 BA10
 0004400 BA11
 0004500 BA12
 0004600 BA13
 0004700 BA14
 0004800 BA15
 0004900 BA2
 0005000 BA3
 0005100 BA4
 0005200 BA5
 0005300 BA6
 0005400 BA7
 0005500 BA8
 0005510 K/BA815-0/
 0005534 W/BA815-0/1
 0005514 L/BA815-0/1
 0005535 W/BA815-0/2
 0005515 L/BA815-0/2
 0005536 W/BA815-0/3
 0005516 L/BA815-0/3
 0005537 W/BA815-0/4
 0005517 L/BA815-0/4
 0005538 W/BA815-0/5
 0005518 L/BA815-0/5
 0005539 W/BA815-0/6
 0005540 W/BA815-0/7
 0005541 W/BA815-0/8
 0005511 K/BA815-1/
 0005542 W/BA815-1/1
 0005519 L/BA815-1/1
 0005543 W/BA815-1/2
 0005520 L/BA815-1/2
 0005544 W/BA815-1/3
 0005521 L/BA815-1/3

123553-100
 03710
 100
 03710
 100

CODE	LINE NO.	ENG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
0005545			W/BA815-1/4													
0005522			L/BA815-1/4													
0005546			W/BA815-1/5													
0005523			L/BA815-1/5													
0005547			W/BA815-1/6													
0005548			W/BA815-1/7													
0005549			W/BA815-1/8													
0005512			K/BA815-2/													
0005550			W/BA815-2/1													
0005524			L/BA815-2/1													
0005551			W/BA815-2/2													
0005525			L/BA815-2/2													
0005552			W/BA815-2/3													
0005526			L/BA815-2/3													
0005553			W/BA815-2/4													
0005527			L/BA815-2/4													
0005554			W/BA815-2/5													
0005528			L/BA815-2/5													
0005555			W/BA815-2/6													
0005556			W/BA815-2/7													
0005557			W/BA815-2/8													
0005513			K/BA815-3/													
0005558			W/BA815-3/1													
0005529			L/BA815-3/1													
0005559			W/BA815-3/2													
0005530			L/BA815-3/2													
0005560			W/BA815-3/3													
0005531			L/BA815-3/3													
0005561			W/BA815-3/4													
0005532			L/BA815-3/4													
0005562			W/BA815-3/5													
0005533			L/BA815-3/5													
0005563			W/BA815-3/6													
0005564			W/BA815-3/7													
0005565			W/BA815-3/8													
0005600			BA9													
0005700			BAXADD													
0005800			NSAXADD													
0005900			BC0													
0006000			NSC0													
0005910			K/BC007-0/													
0005934			W/BC007-0/1													
0005914			L/BC007-0/1													
0005935			W/BC007-0/2													
0005915			L/BC007-0/2													
0005936			W/BC007-0/3													
0005916			L/BC007-0/3													
0005937			W/BC007-0/4													
0005917			L/BC007-0/4													
0005938			W/BC007-0/5													
0005918			L/BC007-0/5													

123553-100
03/12/76

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L
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123553-100
03/17/65

0007657	W/BC815-2/8
0007613	K/BC815-3/
0007658	W/BC815-3/1
0007629	L/BC815-3/1
0007659	W/BC815-3/2
0007630	L/BC815-3/2
0007660	W/BC815-3/3
0007631	L/BC815-3/3
0007661	W/BC815-3/4
0007632	L/BC815-3/4
0007662	W/BC815-3/5
0007633	L/BC815-3/5
0007663	W/BC815-3/6
0007664	W/BC815-3/7
0007665	W/BC815-3/8
0007700	BC9
0007800	BCXADD
0007900	BKWD
0008000	C0
0008100	C1
0008200	C10
0008300	C10ST
0008350	NC10ST
0008400	C11
0008500	C12
0008600	C12ST
0008700	C13
0008800	C13ST
0008900	C14
0009000	C15
0009100	NC15
0009130	S/C15
0009160	R/C15
0009200	NC15F
0009300	C2
0009400	C3
0009500	C4
0009600	C5
0009700	C6
0009800	C6XM6
0009900	C7
0010000	C7XM7
0010100	C8
0010200	C8ST
0010300	C9
0010400	CBA
0010500	NCBA
0010600	CC1
0010700	NCC1
0010730	S/CC1
0010760	R/CC1

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	/	PINS	/	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	123553-100	C
																	0371276	
	0010800																	
	0010900																	
	0010920																	
	0010940																	
	0011350																	
	0011400																	
	0011450																	
	0011460																	
	0011500																	
	0011600																	
	0011700																	
	0011800																	
	0011900																	
	0012000																	
	0012100																	
	0012200																	
	0012300																	
	0012400																	
	0012500																	
	0012600																	
	0012700																	
	0012800																	
	0012900																	
	0013100																	
	0013200																	
	0013300																	
	0013400																	
	0013500																	
	0013600																	
	0013700																	
	0013800																	
	0013900																	
	0014000																	
	0014100																	
	0014200																	
	0014300																	
	0014400																	
	0014500																	
	0014600																	
	0014700																	
	0014800																	
	0015000																	
	0015100																	
	0015200																	
	0015300																	
	0015400																	
	0015500																	
	0015600																	
	0015800																	
	0015900																	
	0016000																	

SDS

SCIENTIFIC DATA SYSTEMS
SANTA MONICA CALIFORNIA

CODE	LINE NO.	CMO	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70

0016100 CM031
 0016200 CM032
 0016300 CM033
 0016400 CM034
 0016500 CM035
 0016600 CM036
 0016700 CM037
 0016800 CM038
 0016900 CM039
 0017000 CM040
 0017100 CM041
 0017200 CM042
 0017300 CM043
 0017400 CM044
 0017500 NCM044
 0017600 CM045
 0017700 NCM045
 0017800 CM046
 0017900 CM047
 0018000 NCM047
 0018100 CM048
 0018200 CM049
 0018250 CM050
 0018300 CMD
 0018400 NCM0
 0018410 S/CMD
 0018420 R/CMD
 0018500 CMDF
 0018600 CNST
 0018700 NCMST
 0018610 /CNST/
 0018800 CNSTNME
 0018850 /CNSTNME/
 0018900 NCBND1
 0018950 /NCBND1/
 0019000 NCBND2
 0019050 /NCBND2/
 0019100 CX0
 0019200 NCX0
 0019300 NCX0/1-0
 0019400 NCX0/1-1
 0019500 NCXBA
 0019600 CXBA-0
 0019700 CXBA-1
 0019800 CXBCL
 0019900 CXBCLI
 0020000 CXBCU
 0020100 CXBCUI
 0020200 NCXM
 0020600 CXM-0
 0020700 CXM-1

123553-100
 03/12/69
 C/L
 F

SDS

SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

CODE LINE NO. CHG LOGIC EQUATIONS / PINS / REMARKS

123553-100
03712763

1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

SIGMA 1.64PV 2471

- 0027596 GND14B16
- 0027627 GND14C16
- 0027659 GND14D16
- 0027660 GND15D16
- 0027565 GND16A16
- 0027661 GND16D16
- 0027662 GND17D16
- 0027567 GND18A16
- 0027663 GND18D16
- 0027664 GND19D16
- 0027633 GND20C16
- 0027665 GND20D16
- 0027602 GND21B16
- 0027666 GND21D16
- 0027571 GND22A16
- 0027603 GND22B32
- 0027667 GND22D16
- 0027572 GND23A32
- 0027604 GND23B32
- 0027636 GND23C16
- 0027668 GND23D16
- 0027605 GND24B16
- 0027637 GND24C16
- 0027669 GND24D16
- 0027574 GND25A16
- 0027638 GND25C16
- 0027670 GND25D16
- 0027639 GND26C16
- 0027671 GND26D16
- 0027640 GND27C16
- 0027672 GND27D16
- 0027641 GND28C16
- 0027673 GND28D16
- 0027642 GND29C16
- 0027674 GND29D16
- 0027643 GND30C16
- 0027675 GND30D16
- 0027580 GND31A16
- 0027581 GND32A16
- 0027700 HO
- 0027800 NH0
- 0027810 S/H0
- 0027820 R/H0
- 0027900 NHCF
- 0028000 H1
- 0028100 NH1
- 0028110 S/H1
- 0028120 R/H1
- 0028200 NH1F
- 0028300 H2
- 0028400 NH2

1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

SDS

SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS																
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100

0028410 S/H2
 0028420 R/H2
 0028500 NH2F
 0028600 H3
 0028700 NH3
 0028710 S/H3
 0028720 R/H3
 0028800 H3F
 0028900 H4
 0029000 NH4
 0029010 S/H4
 0029020 R/H4
 0029100 NH4F
 0029200 H5
 0029300 NH5
 0029310 S/H5
 0029320 R/H5
 0029400 H5F
 0029500 H6
 0029600 NH6
 0029610 S/H6
 0029620 R/H6
 0029700 H6F
 0029800 H7
 0029900 NH7
 0029910 S/H7
 0029920 R/H7
 0030000 H7F
 0030050 /HI0/
 0030100 HJX6F
 0030200 NHJX6F
 0030300 HJX0
 0030400 HJX0I
 0030500 HJXM
 0030600 HX0
 0030700 HX0I
 0030900 HXJM1
 0031000 HXJP1
 0031100 I0
 0031200 NI0
 0031300 I02EVEN
 0031400 NI02EVEN
 0031500 I1
 0031600 NI1
 0031700 I2
 0031800 NI2
 0031900 I3
 0032000 NI3
 0032100 I35EVEN
 0032200 NI35EVEN
 0032300 I4

123653-100
 03/70
 C/L
 F

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS												
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	123653-100	C
	0042400																	
	0042500																	
	0042600																	
	0042700																	
	0042800																	
	0042900																	
	0043000																	
	0043100																	
	0043150																	
	0043200																	
	0043300																	
	0043310																	
	0043320																	
	0043400																	
	0043500																	
	0043600																	
	0043610																	
	0043620																	
	0043800																	
	0043900																	
	0044000																	
	0044100																	
	0044200																	
	0044300																	
	0044400																	
	0044500																	
	0044600																	
	0044700																	
	0044800																	
	0044900																	
	0045000																	
	0045100																	
	0045200																	
	0045300																	
	0045400																	
	0045500																	
	0045600																	
	0045700																	
	0045800																	
	0045900																	
	0046000																	
	0046100																	
	0046200																	
	0046300																	
	0046400																	
	0046500																	
	0046600																	
	0046700																	
	0046800																	
	0046900																	
	0047000																	

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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123553-100
0371753

0049649	/MX23/
0049651	/MX24/
0049653	/MX25/
0049655	/MX26/
0049657	/MX27/
0049659	/MX28/
0049661	/MX29/
0049609	/MX3/
0049663	/MX30/
0049665	/MX31/
0049611	/MX4/
0049613	/MX5/
0049615	/MX6/
0049617	/MX7/
0049619	/MX8/
0049621	/MX9/
0049700	MXA
0049800	NMXADD
0049900	MXADD-0
0050000	MXADD-1
0050200	MXBC-0
0050300	MXBC-1
0050400	MXFR
0050500	MXIS
0050600	NMXIS
0050700	NMXM
0050800	MXM-0
0050900	MXM-1
0051000	MXM-2
0051100	MXM-3
0051150	MYNUM
0051200	00
0051300	01T0S
0051400	01
0051500	01T0S
0051600	02
0051700	03
0051800	04
0051900	04T0S
0052000	05
0052100	06
0052200	07
0052300	0F0
0052310	K/0F007-0/
0052334	W/0F007-0/1
0052314	L/0F007-0/1
0052335	W/0F007-0/2
0052315	L/0F007-0/2
0052336	W/0F007-0/3
0052316	L/0F007-0/3
0052317	L/0F007-0/4

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS																	
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
	0056900																						
	0057000																						
	0057100																						
	0057200																						
	0057300																						
	0057400																						
	0057500																						
	0057600																						
	0057700																						
	0057800																						
	0057900																						
	0058000																						
	0058100																						
	0058200																						
	0058300																						
	0058400																						
	0058500																						
	0058600																						
	0058700																						
	0058800																						
	0058900																						
	0058910																						
	0058920																						
	0059000																						
	0059100																						
	0059200																						
	0059300																						
	0059400																						
	0059500																						
	0059600																						
	0059700																						
	0059900																						
	0060000																						
	0060100																						
	0060200																						
	0060300																						
	0060400																						
	0060600																						
	0060700																						
	0060800																						
	0060900																						
	0061000																						
	0061100																						
	0061150																						
	0061200																						
	0061300																						
	0061400																						
	0061500																						
	0061600																						
	0061700																						
	0061800																						

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS																
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100

0065300 NRSA1
 0065310 S/RSA1
 0065320 R/RSA1
 0065400 NRSA1F
 0065500 RSA2
 0065600 NRSA2
 0065610 S/RSA2
 0065620 R/RSA2
 0065800 RSA2F
 0065750 /RST/
 0065900 S15
 0066000 S16
 0066800 S17
 0066900 S18
 0067000 S19
 0067100 S20
 0067200 S21
 0067300 S22
 0067400 S23
 0067500 S24
 0066100 S25
 0066200 S26
 0066300 S27
 0066400 S28
 0066500 S29
 0066600 S30
 0066700 S31
 0067600 SC
 0067610 /SC/
 0067615 SENSE0D1
 0067660 SENSE0D2
 0067620 SENSE1D1
 0067670 SENSE1D2
 0067630 SENSE2D1
 0067680 SENSE2D2
 0067640 SENSE3D1
 0067690 SENSE3D2
 0067650 SENSE4D1
 0067695 SENSE4D2
 0067655 SENSE5D1
 0067697 SENSE5D2
 0067612 I/SENSED1
 0067657 I/SENSED2
 0067611 /SI0/
 0067698 SPA1
 0067699 SPA2
 0067700 SPA3=0
 0067800 NSPA3=0
 0067900 SPA3=1
 0068000 NSPA3=1
 0068200 SPA4=0

123653-100
 0371076
 C/L



SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	/	PINS	/	REMARKS														
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100

0074000 NWX0
 0074100 WX1
 0074200 ZBC
 0074300 NZBC
 0074400 ZBS
 0074500 NZBS

END OF LIST

LIST FILE

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
	*		AND														
	*		DIRECT INPUT														
	CI		CABLE INPUT														
	+		OR														
	B		BUFFER AMPLIFIER														
	-BDS		BUFFERED DELAY LINE SENSOR														
	-CD		BUFFERED CABLE DRIVER														
	-CLD		CLOCK DRIVER														
	CO		CABLE OUTPUT														
	-CR		BUFFERED CABLE RECEIVER														
	-DL		DELAY LINE TAP														
	-FB		BUFFERED LATCH FLIP-FLÖP (SET)														
	-FBF		BUFFERED LATCH FAST														
	FF		STANDARD J/K FLIP-FLÖP (SET)														
	FN		NAND FLIP-FLÖP (SET)														
	FR		REPEATER FLIP-FLÖP (SET)														
	-GND		GROUND INDICATOR														
	-HSM		HIGH SPEED MEMORY ELEMENT														
	I		INVERTING AMPLIFIER														
	-IDS		INVERTING DELAY LINE SENSOR														
	-NFB		BUFFERED LATCH FLIP-FLÖP (RESET)														
	NFF		STANDARD J/K FLIP-FLÖP (RESET)														
	NFN		NAND FLIP-FLÖP (RESET)														
	NFR		REPEATER FLIP-FLÖP (RESET)														
	-NS		NO SOURCE INDICATOR														
	-SC		SWITCH COMPARTOR														

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I	
1	2 3 4 5 6 7 8	9	10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70					
0	*TD		TIME DELAY ELEMENT					
6	*VS		VOLTAGE SPECIAL					

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
R	0000350		NA0-1	=I	.A0												5
R	0000350					20B10,09,10-08C20T											5
R	0000400		A1	=B*	+ .NAX0	.A1											5
R	0000400					22B27X,\$,\$,23X,27X											5
R	0000401					+ .FR1	.AXFR										5
R	0000401					22B\$,28,	18X										5
R	0000402					+ .M1	.AXM										5
R	0000402					22B\$,29,	22X										5
R	0000450		NA1	=I	.A1												5
R	0000450					20B35,39,	33X,35-32B02T										5
R	0000500		A2	=B*	+ .NAX0	.A2											5
R	0000500					22B12X,\$,\$,23X,12X											5
R	0000501					+ .FR2	.AXFR										5
R	0000501					22B\$,11,	18X										5
R	0000502					+ .M2	.AXM										5
R	0000502					22B\$,10,	22X										5
R	0000600		A3	=B*	+ .NAX0	.A3											5
R	0000600					22B14X,\$,\$,23X,14X											5
R	0000601					+ .FR3	.AXFR										5
R	0000601					22B\$,15,	18X										5
R	0000602					+ .M3	.AXM										5
R	0000602					22B\$,17,	22X										5
R	0000700		A4	=B*	+ .NAX0	.A4											5
R	0000700					22B21X,\$,\$,30X,21X,21X-32B03T											5
R	0000701					+ .FR4	.AXFR										5
R	0000701					22B\$,20,	13X										5
R	0000702					+ .M4	.AXM										5
R	0000702					22B\$,19,	05X										5
R	0000800		NA4	=I	.A4												5
R	0000800					20B45,43,	50X,45-32B04T										5
R	0000900		A5	=B*	+ .NAX0	.A5											5
R	0000900					22B46X,\$,\$,30X,46X,46X-32B05T											5
R	0000901					+ .FR5	.AXFR										5
R	0000901					22B\$,47,	13X										5
R	0000902					+ .M5	.AXM										5
R	0000902					22B\$,50,	05X										5
R	0001000		NA5	=I	.A5												5
R	0001000					20B44,42,	50X,44-32B06T										5

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
	1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70						
	0001100	A6	=B* +.NAXO	.A6			
P	0001100		22B09X,\$,\$,30X,09X,09X-32307T				
	0001101		+ .FR6	.AXFR			
P	0001101		22B\$,08,	13X			
	0001102		+ .M6	.AXM			
P	0001102		22B\$,06,	05X			
	0001200	NA6	=I .A6	.			
P	0001200		20B46,30,	50X,46-32B08T			
	0001300	A7	=B* +.NAXO	.A7			
P	0001300		22B07X,\$,\$,30X,07X,07X-32B09T				
	0001301		+ .FR7	.AXFR			
P	0001301		22B\$,04,	13X			
	0001302		+ .M7	.AXM			
P	0001302		22B\$,03,	05X			
	0001400	NA7	=I .A7	.			
P	0001400		20B47,31,	50X,47-32B10T			
	0001600	ADD0	=B* +.K0				
P	0001600		31B37X,\$,\$,31X,37X-10D01T-32C01C-32D01C				
	0001601		+ .C0				
P	0001601		31B\$,29X				
	0001602		I* +.K0	.C0			
P	0001602		31B37X,\$,\$,31X,29X				
	0001700	ADD1	=B* +.K1				
P	0001700		31B38X,\$,\$,41X,38X-10D02T-32C02C-32D02C				
	0001701		+ .C1				
P	0001701		31B\$,21X				
	0001702		I* +.K1	.C1			
P	0001702		31B38X,\$,\$,41X,21X				
	0001800	ADD10	=B* +.K10				
P	0001800		27B38X,\$,\$,41X,38X-10D11T-32C11C-32D11D				
	0001801		+ .C10				
P	0001801		27B\$,21X				
	0001802		I* +.K10	.C10			
P	0001802		27B38X,\$,\$,41X,21X				
	0001900	ADD11	=B* +.K11				
P	0001900		27B34X,\$,\$,44X,34X-10D12T-32C12C-32D12C				
	0001901		+ .C11				
P	0001901		27B\$,22X				
	0001902		I* +.K11	.C11			
P	0001902		27B34X,\$,\$,44X,22X				

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I
	1	2	3	4	5	6	7
	8	9	10	11	12	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
	43	44	45	46	47	48	49
	50	51	52	53	54	55	56
	57	58	59	60	61	62	63
	64	65	66	67	68	69	70
P	0003500		NAIBFN	=I .AIBFN	.		
P	0003500			02C36,37,	33X,36-07A03T		
P	0003600		AR	==CR */ARX/			
P	0003600			10A08,\$			
P	0003610		/AVθ/	==NS			
P	0003610						
P	0003615		AVθ	==CR */AVθ/			
P	0003615			01D08,\$,08-09C08C-09D08C-04B17T			
P	0003625		/ASC/	==CD *F1			
P	0003625			14C\$,33			
P	0003650		/ARX/	==CD *GND10A32			
P	0003650			10A\$,03			
P	0003700		NAXO	=I .PH2T0D2	.		
P	0003700			16B13,04,	08,13-32B01T		
P	0003800		AXFR	=I .NCM010	.NAXFR		
P	0003800			16B46,40,	41,46-32B11T		
P	0003900		NAXFR	=I .PH2T1D2	.F1		
P	0003900			16B02,03,	09,02-15C02T		
P	0004000		AXM	=I .NPH10T0	.		
P	0004000			17B45,43,	50X,45-32B12T		
P	0004100		BA0	==HSM			
P	0004100			23D43,43-32B13T-32D25C-32C25C			
P	0004101			-HSM			
P	0004101			24D43			
P	0004102			-HSM			
P	0004102			25D43			
P	0004103			-HSM			
P	0004103			26D43			
P	0004110		K/BA007-01	=.BAXADD	.		
P	0004110			23D13,	31		
P	0004111		K/BA007-1/	=.BAXADD	.		
P	0004111			24D13,	31		
P	0004112		K/BA007-2/	=.BAXADD	.		
P	0004112			25D13,	31		
P	0004113		K/BA007-3/	=.BAXADD	.		
P	0004113			26D13,	31		

CODE	LINE NO.	CHK	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0004114		L/BA007-0/1	= .NSPA5-0 23D23,	.NSPA4-0 20X,	.NSPA3-0 21X,	.	.	.	27X,	26X,	22X					B B
P	0004115		L/BA007-0/2	= .SPA5-0 23D25,	.NSPA4-0 20X,	.NSPA3-0 21X,	.	.	.	27X,	26X,	22X					B B
P	0004116		L/BA007-0/3	= .LS0 23D18													B B
P	0004117		L/BA007-0/4	= .SPA7-0 23D29													B B
P	0004118		L/BA007-0/5	= .SPA6-0 23D30													B B
P	0004119		L/BA007-1/1	= .NSPA5-0 24D23,	.NSPA4-0 20X,	.SPA3-0 21X,	.	.	.	27X,	26X,	22X					B B
P	0004120		L/BA007-1/2	= .SPA5-0 24D25,	.NSPA4-0 20X,	.SPA3-0 21X,	.	.	.	27X,	26X,	22X					B B
P	0004121		L/BA007-1/3	= .LS0 24D18													B B
P	0004122		L/BA007-1/4	= .SPA7-0 24D29													B B
P	0004123		L/BA007-1/5	= .SPA6-0 24D30													B B
P	0004124		L/BA007-2/1	= .NSPA5-0 25D23,	.SPA4-0 20X,	.NSPA3-0 21X,	.	.	.	27X,	26X,	22X					B B
P	0004125		L/BA007-2/2	= .SPA5-0 25D25,	.SPA4-0 20X,	.NSPA3-0 21X,	.	.	.	27X,	26X,	22X					B B
P	0004126		L/BA007-2/3	= .LS0 25D18													B B
P	0004127		L/BA007-2/4	= .SPA7-0 25D29													B B
P	0004128		L/BA007-2/5	= .SPA6-0 25D30													B B
P	0004129		L/BA007-3/1	= .NSPA5-0 26D23,	.SPA4-0 20X,	.SPA3-0 21X,	.	.	.	27X,	26X,	22X					B B
P	0004130		L/BA007-3/2	= .SPA5-0 26D25,	.SPA4-0 20X,	.SPA3-0 21X,	.	.	.	27X,	26X,	22X					B B

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	

P	0004131		L/BA007-3/3	=•LS0													
P	0004131			26D18													
P	0004132		L/BA007-3/4	=•SPA7-0													
P	0004132			26D29													
P	0004133		L/BA007-3/5	=•SPA6-0													
P	0004133			26D30													
P	0004134		W/BA007-0/1	=•ADD0													
P	0004134			23D35													
P	0004135		W/BA007-0/2	=•ADD1													
P	0004135			23D34													
P	0004136		W/BA007-0/3	=•ADD2													
P	0004136			23D19													
P	0004137		W/BA007-0/4	=•ADD3													
P	0004137			23D12													
P	0004138		W/BA007-0/5	=•ADD4													
P	0004138			23D33													
P	0004139		W/BA007-0/6	=•ADD5													
P	0004139			23D28													
P	0004140		W/BA007-0/7	=•ADD6													
P	0004140			23D17													
P	0004141		W/BA007-0/8	=•ADD7													
P	0004141			23D11													
P	0004142		W/BA007-1/1	=•ADD0													
P	0004142			24D35													
P	0004143		W/BA007-1/2	=•ADD1													
P	0004143			24D34													
P	0004144		W/BA007-1/3	=•ADD2													
P	0004144			24D19													
P	0004145		W/BA007-1/4	=•ADD3													
P	0004145			24D12													
P	0004146		W/BA007-1/5	=•ADD4													
P	0004146			24D33													
P	0004147		W/BA007-1/6	=•ADD5													
P	0004147			24D28													

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0004148		W/BA007-1/7	=•ADD6													3
	0004148			24D17													3
P	0004149		W/BA007-1/8	=•ADD7													3
	0004149			24D11													3
P	0004150		W/BA007-2/1	=•ADD0													3
	0004150			25D35													3
P	0004151		W/BA007-2/2	=•ADD1													3
	0004151			25D34													3
P	0004152		W/BA007-2/3	=•ADD2													3
	0004152			25D19													3
P	0004153		W/BA007-2/4	=•ADD3													3
	0004153			25D12													3
P	0004154		W/BA007-2/5	=•ADD4													3
	0004154			25D33													3
P	0004155		W/BA007-2/6	=•ADD5													3
	0004155			25D28													3
P	0004156		W/BA007-2/7	=•ADD6													3
	0004156			25D17													3
P	0004157		W/BA007-2/8	=•ADD7													3
	0004157			25D11													3
P	0004158		W/BA007-3/1	=•ADD0													3
	0004158			26D35													3
P	0004159		W/BA007-3/2	=•ADD1													3
	0004159			26D34													3
P	0004160		W/BA007-3/3	=•ADD2													3
	0004160			26D19													3
P	0004161		W/BA007-3/4	=•ADD3													3
	0004161			26D12													3
P	0004162		W/BA007-3/5	=•ADD4													3
	0004162			26D33													3
P	0004163		W/BA007-3/6	=•ADD5													3
	0004163			26D28													3
P	0004164		W/BA007-3/7	=•ADD6													3
	0004164			26D17													3

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
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1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

P	0004165		W/BA007-3/8	=-ADD7			
P	0004165			26D11			
P	0004200		BA1	=-HSM			
P	0004200			23D41, 41-32B14T-32D26C-32C26C			
P	0004201			-HSM			
P	0004201			24D41			
P	0004202			-HSM			
P	0004202			25D41			
P	0004203			-HSM			
P	0004203			26D41			
P	0004300		BA10	=-HSM			
P	0004300			27D09, 09-32B24T-32D36C-32C36C			
P	0004301			-HSM			
P	0004301			28D09			
P	0004302			-HSM			
P	0004302			29D09			
P	0004303			-HSM			
P	0004303			30D09			
P	0004400		BA11	=-HSM			
P	0004400			27D02, 02-32B25T-32D37C-32C37C			
P	0004401			-HSM			
P	0004401			28D02			
P	0004402			-HSM			
P	0004402			29D02			
P	0004403			-HSM			
P	0004403			30D02			
P	0004500		BA12	=-HSM			
P	0004500			27D45, 45-32B26T-32D38C-32C38C			
P	0004501			-HSM			
P	0004501			28D45			
P	0004502			-HSM			
P	0004502			29D45			
P	0004503			-HSM			
P	0004503			30D45			
P	0004600		BA13	=-HSM			
P	0004600			27D46, 46-32B27T-32D39C-32C39C			
P	0004601			-HSM			
P	0004601			28D46			
P	0004602			-HSM			
P	0004602			29D46			
P	0004603			-HSM			
P	0004603			30D46			



SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

SIGMA I.O.P. 8471

123653-001
03/12/68

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L
1	2 3 4 5 6 7 8 9	10	11 12 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 43 44 45 46 47 48 49 50	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70	

	0004700		BA14	=-HSM			
P	0004700			27D04,04-32B28T-32D40C-32C40C			
	0004701			-HSM			
P	0004701			28D04			
	0004702			-HSM			
P	0004702			29D04			
	0004703			-HSM			
P	0004703			30D04			

	0004800		BA15	=-HSM			
P	0004800			27D01,01-32B29T-32D41T-32C41C			
	0004801			-HSM			
P	0004801			28D01			
	0004802			-HSM			
P	0004802			29D01			
	0004803			-HSM			
P	0004803			30D01			

	0004900		BA2	=-HSM			
P	0004900			23D09,09-32B15T-32D27C-32C27C			
	0004901			-HSM			
P	0004901			24D09			
	0004902			-HSM			
P	0004902			25D09			
	0004903			-HSM			
P	0004903			26D09			

	0005000		BA3	=-HSM			
P	0005000			23D02,02-32B17T-32D28C-32C28C			
	0005001			-HSM			
P	0005001			24D02			
	0005002			-HSM			
P	0005002			25D02			
	0005003			-HSM			
P	0005003			26D02			

	0005100		BA4	=-HSM			
P	0005100			23D45,45-32B18T-32D29C-32C29C			
	0005101			-HSM			
P	0005101			24D45			
	0005102			-HSM			
P	0005102			25D45			
	0005103			-HSM			
P	0005103			26D45			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L
1	2	3	4	5	6	7	8
	1		10	11	12	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	43	44
	45		46	47	48	49	50
	51		52	53	54	55	56
	57		58	59	60	61	62
	63		64	65	66	67	68
	69		70				
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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
1	2	3	4	5	6	7	8
P	0005515		L/BA815-0/2	=•SPA5-0 27D25,	•NSPA4-0 20X,	•NSPA3-0 21X,	• 27X, 26X, 22X
P	0005516		L/BA815-0/3	=•LSO 27D18			
P	0005517		L/BA815-0/4	=•SPA7-0 27D29			
P	0005518		L/BA815-0/5	=•SPA6-0 27D30			
P	0005519		L/BA815-1/1	=•NSPA5-0 28D23,	•NSPA4-0 20X,	•SPA3-0 21X,	• 27X, 26X, 22X
P	0005520		L/BA815-1/2	=•SPA5-0 28D25,	•NSPA4-0 20X,	•SPA3-0 21X,	• 27X, 26X, 22X
P	0005521		L/BA815-1/3	=•LSO 28D18			
P	0005522		L/BA815-1/4	=•SPA7-0 28D29			
P	0005523		L/BA815-1/5	=•SPA6-0 28D30			
P	0005524		L/BA815-2/1	=•NSPA5-0 29D23,	•SPA4-0 20X,	•NSPA3-0 21X,	• 27X, 26X, 22X
P	0005525		L/BA815-2/2	=•SPA5-0 29D25,	•SPA4-0 20X,	•NSPA3-0 21X,	• 27X, 26X, 22X
P	0005526		L/BA815-2/3	=•LSO 29D18			
P	0005527		L/BA815-2/4	=•SPA7-0 29D29			
P	0005528		L/BA815-2/5	=•SPA6-0 29D30			
P	0005529		L/BA815-3/1	=•NSPA5-0 30D23,	•SPA4-0 20X,	•SPA3-0 21X,	• 27X, 26X, 22X
P	0005530		L/BA815-3/2	=•SPA5-0 30D25,	•SPA4-0 20X,	•SPA3-0 21X,	• 27X, 26X, 22X
P	0005531		L/BA815-3/3	=•LSO 30D18			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I
	1						
	2						
	8						
	9						
	10						
	15						
	20						
	25						
	30						
	35						
	40						
	45						
	50						
	55						
	60						
	65						
	70						
P	0005532		L/BA815-3/4	=•SPA7-0			
	0005532			30D29			
P	0005533		L/BA815-3/5	=•SPA6-0			
	0005533			30D30			
P	0005534		W/BA815-0/1	=•ADD8			
	0005534			27D35			
P	0005535		W/BA815-0/2	=•ADD9			
	0005535			27D34			
P	0005536		W/BA815-0/3	=•ADD10			
	0005536			27D19			
P	0005537		W/BA815-0/4	=•ADD11			
	0005537			27D12			
P	0005538		W/BA815-0/5	=•ADD12			
	0005538			27D33			
P	0005539		W/BA815-0/6	=•ADD13			
	0005539			27D28			
P	0005540		W/BA815-0/7	=•ADD14			
	0005540			27D17			
P	0005541		W/BA815-0/8	=•ADD15			
	0005541			27D11			
P	0005542		W/BA815-1/1	=•ADD8			
	0005542			28D35			
P	0005543		W/BA815-1/2	=•ADD9			
	0005543			28D34			
P	0005544		W/BA815-1/3	=•ADD10			
	0005544			28D19			
P	0005545		W/BA815-1/4	=•ADD11			
	0005545			28D12			
P	0005546		W/BA815-1/5	=•ADD12			
	0005546			28D33			
P	0005547		W/BA815-1/6	=•ADD13			
	0005547			28D28			
P	0005548		W/BA815-1/7	=•ADD14			
	0005548			28D17			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
1	2	3	4	5	6	7	8
	9	10	11	12	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	43
	44	45	46	47	48	49	50
	51	52	53	54	55	56	57
	58	59	60	61	62	63	64
	65	66	67	68	69	70	
P	0005549		W/BA815-1/8	=•ADD15			
P	0005549			28D11			
P	0005550		W/BA815-2/1	=•ADD8			
P	0005550			29D35			
P	0005551		W/BA815-2/2	=•ADD9			
P	0005551			29D34			
P	0005552		W/BA815-2/3	=•ADD10			
P	0005552			29D19			
P	0005553		W/BA815-2/4	=•ADD11			
P	0005553			29D12			
P	0005554		W/BA815-2/5	=•ADD12			
P	0005554			29D33			
P	0005555		W/BA815-2/6	=•ADD13			
P	0005555			29D28			
P	0005556		W/BA815-2/7	=•ADD14			
P	0005556			29D17			
P	0005557		W/BA815-2/8	=•ADD15			
P	0005557			29D11			
P	0005558		W/BA815-3/1	=•ADD8			
P	0005558			30D35			
P	0005559		W/BA815-3/2	=•ADD9			
P	0005559			30D34			
P	0005560		W/BA815-3/3	=•ADD10			
P	0005560			30D19			
P	0005561		W/BA815-3/4	=•ADD11			
P	0005561			30D12			
P	0005562		W/BA815-3/5	=•ADD12			
P	0005562			30D33			
P	0005563		W/BA815-3/6	=•ADD13			
P	0005563			30D28			
P	0005564		W/BA815-3/7	=•ADD14			
P	0005564			30D17			
P	0005565		W/BA815-3/8	=•ADD15			
P	0005565			30D11			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	RJNS	REMARKS	C/
1	2	3	4	5	6	7	8
P	0005600		BA9	=-HSM			
P	0005600			27D41,41-32B23T-32D35C-32C35C			
P	0005601			-HSM			
P	0005601			28D41			
P	0005602			-HSM			
P	0005602			29D41			
P	0005603			-HSM			
P	0005603			30D41			
P	0005700		BAXADD	=I .NBAXADD .NCM020			
P	0005700			16C36,44, 37,36-23D05T-32C42C-32D42C			
P	0005800		NBAXADD	=I .PH3D1 .T2D1-20			
P	0005800			16C35,38, 43,35-15C03T			
P	0005801			I .PH12D1 .T2D1-20 .F3 .CM046			
P	0005801			18C15,30, 18, 31, 17			
P	0005802			I .PH5D1-1 .T2D1-20 .NEH .			
P	0005802			18C14,21, 20, 29, 19			
P	0005900		BC0	=-HSM			
P	0005900			15D43,43-20A01T-31D01C-31C01C			
P	0005901			-HSM			
P	0005901			16D43			
P	0005902			-HSM			
P	0005902			17D43			
P	0005903			-HSM			
P	0005903			18D43			
P	0005910		K/BC007-0/	=.BCXADD .			
P	0005910			15D13, 31			
P	0005911		K/BC007-1/	=.BCXADD .			
P	0005911			16D13, 31			
P	0005912		K/BC007-2/	=.BCXADD .			
P	0005912			17D13, 31			
P	0005913		K/BC007-3/	=.BCXADD .			
P	0005913			16D13, 31			
P	0005914		L/BC007-0/1	= .NSPA5-1 .NSPA4-1 .NSPA3-1 .			
P	0005914			15D23, 20X, 21X, 27X, 26X, 22X			
P	0005915		L/BC007-0/2	= .SPA5-1 .NSPA4-1 .NSPA3-1 .			
P	0005915			15D25, 20X, 21X, 27X, 26X, 22X			
P	0005916		L/BC007-0/3	= .LS1			
P	0005916			15D18			
P	0005917		L/BC007-0/4	= .SPA7-1			
P	0005917			15D29			

SDS

SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

SIGMA I.O.P. 8471

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123653-001 F
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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS		REMARKS	C/L									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0005918		L/BC007-0/5	=•SPA6-1 15D30													B
P	0005919		L/BC007-1/1	=•NSPA5-1 16D23,	•NSPA4-1 20X,	•SPA3-1 21X,	• 27X,	• 26X,	• 22X								B
P	0005920		L/BC007-1/2	=•SPA5-1 16D25,	•NSPA4-1 20X,	•SPA3-1 21X,	• 27X,	• 26X,	• 22X								B
P	0005921		L/BC007-1/3	=•LS1 16D18													B
P	0005922		L/BC007-1/4	=•SPA7-1 16D29													B
P	0005923		L/BC007-1/5	=•SPA6-1 16D30													B
P	0005924		L/BC007-2/1	=•NSPA5-1 17D23,	•SPA4-1 20X,	•NSPA3-1 21X,	• 27X,	• 26X,	• 22X								B
P	0005925		L/BC007-2/2	=•SPA5-1 17D25,	•SPA4-1 20X,	•NSPA3-1 21X,	• 27X,	• 26X,	• 22X								B
P	0005926		L/BC007-2/3	=•LS1 17D18													B
P	0005927		L/BC007-2/4	=•SPA7-1 17D29													B
P	0005928		L/BC007-2/5	=•SPA6-1 17D30													B
P	0005929		L/BC007-3/1	=•NSPA5-1 18D23,	•SPA4-1 20X,	•SPA3-1 21X,	• 27X,	• 26X,	• 22X								B
P	0005930		L/BC007-3/2	=•SPA5-1 18D25,	•SPA4-1 20X,	•SPA3-1 21X,	• 27X,	• 26X,	• 22X								B
P	0005931		L/BC007-3/3	=•LS1 18D18													B
P	0005932		L/BC007-3/4	=•SPA7-1 18D29													B
P	0005933		L/BC007-3/5	=•SPA6-1 18D30													B
P	0005934		W/BC007-0/1	=•ADD0 15D35													B

CODE	LINE NO.	CHG	LOGIC		EQUATIONS		PINS		REMARKS	C/L
			1	2	3	4	5	6			7	8
P	0005935		W/BC007-0/2	=•ADD1	15034					B
P	0005936		W/BC007-0/3	=•ADD2	15019					B
P	0005937		W/BC007-0/4	=•ADD3	15012					B
P	0005938		W/BC007-0/5	=•ADD4	15033					B
P	0005939		W/BC007-0/6	=•ADD5	15028					B
P	0005940		W/BC007-0/7	=•ADD6	15017					B
P	0005941		W/BC007-0/8	=•ADD7	15011					B
P	0005942		W/BC007-1/1	=•ADD0	16035					B
P	0005943		W/BC007-1/2	=•ADD1	16034					B
P	0005944		W/BC007-1/3	=•ADD2	16019					B
P	0005945		W/BC007-1/4	=•ADD3	16012					B
P	0005946		W/BC007-1/5	=•ADD4	16033					B
P	0005947		W/BC007-1/6	=•ADD5	16028					B
P	0005948		W/BC007-1/7	=•ADD6	16017					B
P	0005949		W/BC007-1/8	=•ADD7	16011					B
P	0005950		W/BC007-2/1	=•ADD0	17035					B
P	0005951		W/BC007-2/2	=•ADD1	17034					B

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
1	2 3 4 5 6 7 8	9	10	11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70			
P	0005952		W/BC007-2/3	=•ADD2			
P	0005952			17019			
P	0005953		W/BC007-2/4	=•ADD3			
P	0005953			17012			
P	0005954		W/BC007-2/5	=•ADD4			
P	0005954			17033			
P	0005955		W/BC007-2/6	=•ADD5			
P	0005955			17028			
P	0005956		W/BC007-2/7	=•ADD6			
P	0005956			17017			
P	0005957		W/BC007-2/8	=•ADD7			
P	0005957			17011			
P	0005958		W/BC007-3/1	=•ADD0			
P	0005958			18035			
P	0005959		W/BC007-3/2	=•ADD1			
P	0005959			18034			
P	0005960		W/BC007-3/3	=•ADD2			
P	0005960			18019			
P	0005961		W/BC007-3/4	=•ADD3			
P	0005961			18012			
P	0005962		W/BC007-3/5	=•ADD4			
P	0005962			18033			
P	0005963		W/BC007-3/6	=•ADD5			
P	0005963			18028			
P	0005964		W/BC007-3/7	=•ADD6			
P	0005964			18017			
P	0005965		W/BC007-3/8	=•ADD7			
P	0005965			18011			
P	0006000		NBC0	=I •BC0			
P	0006000			17A35, 39,		33X, 35-07A02T	

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I
	1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70						
P	0006100		BC1	=-HSM			
P	0006100			15D41, 41-07A04T-31D02C-31C02C			
P	0006101			-HSM			
P	0006101			16D41			
P	0006102			-HSM			
P	0006102			17D41			
P	0006103			-HSM			
P	0006103			18D41			
P	0006200		BC10	=-HSM			
P	0006200			19D09, 09-20A02T-31D11C-31C11C			
P	0006201			-HSM			
P	0006201			20D09			
P	0006202			-HSM			
P	0006202			21D09			
P	0006203			-HSM			
P	0006203			22D09			
P	0006300		BC11	=-HSM			
P	0006300			19D02, 02-20A03T-31D12C-31C12C			
P	0006301			-HSM			
P	0006301			20D02			
P	0006302			-HSM			
P	0006302			21D02			
P	0006303			-HSM			
P	0006303			22D02			
P	0006400		BC12	=-HSM			
P	0006400			19D45, 45-20A04T-31D13C-31C13C			
P	0006401			-HSM			
P	0006401			20D45			
P	0006402			-HSM			
P	0006402			21D45			
P	0006403			-HSM			
P	0006403			22D45			
P	0006500		BC13	=-HSM			
P	0006500			19D46, 46-20A05T-31D14C-31C14C			
P	0006501			-HSM			
P	0006501			20D46			
P	0006502			-HSM			
P	0006502			21D46			
P	0006503			-HSM			
P	0006503			22D46			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	

P	0006600		BC14	=-HSM													
P	0006600			19D04,04-20A06T-31D15C-31C15C													
	0006601			-HSM													
P	0006601			20D04													
	0006602			-HSM													
P	0006602			21D04													
	0006603			-HSM													
P	0006603			22D04													
	0006700		BC15	=-HSM													
P	0006700			19D01,01-20A07T-31D17C-31C17C													
	0006701			-HSM													
P	0006701			20D01													
	0006702			-HSM													
P	0006702			21D01													
	0006703			-HSM													
P	0006703			22D01													
	0006800		NBC15	=I BC15													
P	0006800			17A34,40, 33X,34-07A05T													
	0006900		BC2	=-HSM													
P	0006900			15D09,09-20A08T-31D03C-31C03C													
	0006901			-HSM													
P	0006901			16D09													
	0006902			-HSM													
P	0006902			17D09													
	0006903			-HSM													
P	0006903			18D09													
	0007000		BC3	=-HSM													
P	0007000			15D02,02-20A09T-31D04C-31C04C													
	0007001			-HSM													
P	0007001			16D02													
	0007002			-HSM													
P	0007002			17D02													
	0007003			-HSM													
P	0007003			18D02													
	0007100		BC4	=-HSM													
P	0007100			15D45,45-20A10T-31D05C-31C05C													
	0007101			-HSM													
P	0007101			16D45													
	0007102			-HSM													
P	0007102			17D45													
	0007103			-HSM													
P	0007103			18D45													

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
1	2 3 4 5 6 7 8	9	10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70				
	0007200		BC5	==HSM			
P	0007200			15D46,46-20A11T-31D06C-31C06C			
	0007201			=HSM			
P	0007201			16D46			
	0007202			=HSM			
P	0007202			17D46			
	0007203			=HSM			
P	0007203			18D46			
	0007300		BC6	==HSM			
P	0007300			15D04,04-20A12T-31D07C-31C07C			
	0007301			=HSM			
P	0007301			16D04			
	0007302			=HSM			
P	0007302			17D04			
	0007303			=HSM			
P	0007303			18D04			
	0007400		NBC6	=I .BC6 .			
P	0007400			17A26,24, 29X,26-07A06T			
	0007500		BC7	==HSM			
P	0007500			15D01,01-20A13T-31D08C-31C08C			
	0007501			=HSM			
P	0007501			16D01			
	0007502			=HSM			
P	0007502			17D01			
	0007503			=HSM			
P	0007503			18D01			
	0007600		BC8	==HSM			
P	0007600			19D43,43-20A14T-31D09C-31C09C			
	0007601			=HSM			
P	0007601			20D43			
	0007602			=HSM			
P	0007602			21D43			
	0007603			=HSM			
P	0007603			22D43			
	0007610		K/BC815-0/	==BCXADD .			
P	0007610			19D13, 31			
	0007611		K/BC815-1/	==BCXADD .			
P	0007611			20D13, 31			
	0007612		K/BC815-2/	==BCXADD .			
P	0007612			21D13, 31			
	0007613		K/BC815-3/	==BCXADD .			
P	0007613			22D13, 31			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	CAL									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0007614		L/BC815-0/1	=•NSPA5-1 19D23,	•NSPA4-1 20X,	•NSPA3-1 21X,	•	•	•	27X,	26X,	22X				
P	0007615		L/BC815-0/2	=•SPA5-1 19D25,	•NSPA4-1 20X,	•NSPA3-1 21X,	•	•	•	27X,	26X,	22X				
P	0007616		L/BC815-0/3	=•LS1 19D18												
P	0007617		L/BC815-0/4	=•SPA7-1 19D29												
P	0007618		L/BC815-0/5	=•SPA6-1 19D30												
P	0007619		L/BC815-1/1	=•NSPA5-1 20D23,	•NSPA4-0 20X,	•SPA3-1 21X,	•	•	•	27X,	26X,	22X				
P	0007620		L/BC815-1/2	=•SPA5-1 20D25,	•NSPA4-0 20X,	•SPA3-1 21X,	•	•	•	27X,	26X,	22X				
P	0007621		L/BC815-1/3	=•LS1 20D18												
P	0007622		L/BC815-1/4	=•SPA7-1 20D29												
P	0007623		L/BC815-1/5	=•SPA6-1 20D30												
P	0007624		L/BC815-2/1	=•NSPA5-0 21D23,	•SPA4-1 20X,	•NSPA3-0 21X,	•	•	•	27X,	26X,	22X				
P	0007625		L/BC815-2/2	=•SPA5-0 21D25,	•SPA4-1 20X,	•NSPA3-0 21X,	•	•	•	27X,	26X,	22X				
P	0007626		L/BC815-2/3	=•LS1 21D18												
P	0007627		L/BC815-2/4	=•SPA7-0 21D29												
P	0007628		L/BC815-2/5	=•SPA6-0 21D30												
P	0007629		L/BC815-3/1	=•NSPA5-0 22D23,	•SPA4-0 20X,	•SPA3-0 21X,	•	•	•	27X,	26X,	22X				
P	0007630		L/BC815-3/2	=•SPA5-0 22D25,	•SPA4-0 20X,	•SPA3-0 21X,	•	•	•	27X,	26X,	22X				

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I
	1 2 3 4 5 6 7 8 9 10 15 20 25 30 35 40 45 50 55 60 65 70						
P	0007631		L/BC815-3/3	=•LS1			
P	0007631			22D18			
P	0007632		L/BC815-3/4	=•SPA7-0			
P	0007632			22D29			
P	0007633		L/BC815-3/5	=•SPA6-0			
P	0007633			22D30			
P	0007634		W/BC815-0/1	=•ADD8			
P	0007634			19D35			
P	0007635		W/BC815-0/2	=•ADD9			
P	0007635			19D34			
P	0007636		W/BC815-0/3	=•ADD10			
P	0007636			19D19			
P	0007637		W/BC815-0/4	=•ADD11			
P	0007637			19D12			
P	0007638		W/BC815-0/5	=•ADD12			
P	0007638			19D33			
P	0007639		W/BC815-0/6	=•ADD13			
P	0007639			19D28			
P	0007640		W/BC815-0/7	=•ADD14			
P	0007640			19D17			
P	0007641		W/BC815-0/8	=•ADD15			
P	0007641			19D11			
P	0007642		W/BC815-1/1	=•ADD8			
P	0007642			20D35			
P	0007643		W/BC815-1/2	=•ADD9			
P	0007643			20D34			
P	0007644		W/BC815-1/3	=•ADD10			
P	0007644			20D19			
P	0007645		W/BC815-1/4	=•ADD11			
P	0007645			20D12			
P	0007646		W/BC815-1/5	=•ADD12			
P	0007646			20D33			
P	0007647		W/BC815-1/6	=•ADD13			
P	0007647			20D28			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0007665		W/BC815-3/8	=•ADD15												
P	0007665			22D11												
P	0007700		BC9	=-HSM												
P	0007700			19D41, 41-20A15T-31D10C-31C10C												
P	0007701			-HSM												
P	0007701			20D41												
P	0007702			-HSM												
P	0007702			21D41												
P	0007703			-HSM												
P	0007703			22D41												
P	0007800		BCXADD	=I •NCM021 •NCM022 •NPH2T2D1												
P	0007800			18C34, 24, 23, 22, 22, 34-15D05T-31C18C-31D18C												
P	0007900		BKWD	=B •I4 •I5												
P	0007900			15A45, 39, 42												
P	0007901			B •N16 •N17												
P	0007901			15A35, 38, 43												
P	0008000		CO	=3* +•NCX0/1-0 •CO												
P	0008000			31B29X, \$, \$, 28X, 29X												
P	0008001			+•BA0 •CXBA=0												
P	0008001			31B\$, 03, 15X												
P	0008002			+•M16 •CXM=0												
P	0008002			31B\$, 07, 09X												
P	0008003			+•M13 •CXMR3=0												
P	0008003			31B\$, 14, 02X												
P	0008004			+•M0 •CXMBO												
P	0008004			31B\$, 20, 10X												
P	0008005			+•BC0 •CXBCU												
P	0008005			31B\$, 24, 23												
P	0008100		C1	=8* +•NCX0/1-0 •C1												
P	0008100			31B21X, \$, \$, 28X, 21X												
P	0008101			+•BA1 •CXBA=0												
P	0008101			31B\$, 13, 15X												
P	0008102			+•M17 •CXM=0												
P	0008102			31B\$, 05, 09X												
P	0008103			+•M14 •CXMR3=0												
P	0008103			31B\$, 04, 02X												
P	0008104			+•M1 •CXMBO												
P	0008104			31B\$, 08, 10X												
P	0008105			+•BC1 •CXBCU												
P	0008105			31B\$, 27, 26												

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L'										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
	0008200		C10	=B* +.NCX0/1-1	.C10												
P	0008200			27B21X,\$,\$,28X,21X													
	0008201			+ .BA10	.CXBA-1												
P	0008201			27B\$,13,	15X												
	0008202			+ .M26	.CXM-1												
P	0008202			27B\$,05,	09X												
	0008203			+ .M23	.CXMR3-1												
P	0008203			27B\$,04,	02X												
	0008204			+ .C10ST	.CXST												
P	0008204			27B\$,08,	10X												
	0008205			+ .BC10	.CXBCL												
P	0008205			27B\$,27,	26												
	0008300		C10ST	=I .NC10ST													
P	0008300			19B01,11,	10,01-27B18T												
	0008350		NC10ST	=I .MPE	.NCMD												
P	0008350			09A46,40,	41,46-20A17T												
	0008351			I .FP	.NORD-1												
P	0008351			09A45,39,	42												
	0008400		C11	=B* +.NCX0/1-1	.C11												
P	0008400			27B22X,\$,\$,28X,22X													
	0008401			+ .BA11	.CXBA-1												
P	0008401			27B\$,17,	15X												
	0008402			+ .M27	.CXM-1												
P	0008402			27B\$,11,	09X												
	0008403			+ .M24	.CXMR3-1												
P	0008403			27B\$,06,	02X												
	0008404			+ .MAE	.CXST												
P	0008404			27B\$,12,	10X												
	0008405			+ .BC11	.CXBCL												
P	0008405			27B\$,25,	30												
	0008500		C12	=B* +.NCX0/1-1	.C12												
P	0008500			26B29X,\$,\$,28X,29X													
	0008501			+ .BA12	.CXBA-1												
P	0008501			26B\$,03,	15X												
	0008502			+ .M28	.CXM-1												
P	0008502			26B\$,07,	09X												
	0008503			+ .M25	.CXMR3-1												
P	0008503			26B\$,14,	02X												
	0008504			+ .C12ST	.CXST												
P	0008504			26B\$,20,	10X												
	0008505			+ .BC12	.CXBCL												
P	0008505			26B\$,24,	23												
	0008600		C12ST	=B .CMD	.MPE												
P	0008600			18B12,06,	05,	07											

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS.	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0008700		C13	=B* +.NCX0/1-1	.C13												B
P	0008700			26B21X, \$, \$, 28X, 21X													B
P	0008701			+ .BA13	.CXBA-1												B
P	0008701			26B\$, 13,	15X												B
P	0008702			+ .M29	.CXM-1												B
P	0008702			26B\$, 05,	09X												B
P	0008703			+ .M26	.CXMR3-1												B
P	0008703			26B\$, 04,	02X												B
P	0008704			+ .C13ST	.CXST												B
P	0008704			26B\$, 08,	10X												B
P	0008705			+ .BC13	.CXBCL												B
P	0008705			26B\$, 27,	26												B
P	0008800		C13ST	=B .CMD	.EH	.NMPE	.NMAE										B
P	0008800			10B15, 30,	18,	31,	17										B
P	0008900		C14	=B* +.NCX0/1-1	.C14												B
P	0008900			26B22X, \$, \$, 28X, 22X													B
P	0008901			+ .BA14	.CXBA-1												B
P	0008901			26B\$, 17,	15X												B
P	0008902			+ .M30	.CXM-1												B
P	0008902			26B\$, 11,	09X												B
P	0008903			+ .M27	.CXMR3-1												B
P	0008903			26B\$, 06,	02X												B
P	0008904			+ .EH	.CXST												B
P	0008904			26B\$, 12,	10X												B
P	0008905			+ .BC14	.CXBCL												B
P	0008905			26B\$, 25,	30												B
P	0009000		C15	=-NFB													B
P	0009000			24B23, 23-27B19T													B
P	0009100		NC15	=-FB													B
P	0009100			24B25													B
P	0009130		S/C15	=* +.CXBA-1	.BA15												B
P	0009130			24B\$, \$, 15,	13												B
P	0009131			+ .CXBCU	.BC15												B
P	0009131			24B\$, 11,	09												B
P	0009160		R/C15	=* +.PH2T202	.	.											B
P	0009160			24B\$, \$, 02,	10,	03											B
P	0009161			+ .CX0	.	.											B
P	0009161			24B\$, 05,	07												B

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0009200		NC15F	=I	.CXST	.8RDIN	.12										
P	0009200			19B12,06,		05,	07										
P	0009201			I	.CXM-1	.M31											
P	0009201			19B13,04,		08											
P	0009202			I	.CXMR3-1	.M28											
P	0009202			19B02,03,		09											
P	0009203			-FBF													
P	0009203			24B21													
P	0009300		C2	=B* +.NCX0/1-0	.C2												
P	0009300			31B22X,\$,\$,28X,	22X												
P	0009301			+ .BA2	.CXBA=0												
P	0009301			31B\$,17X,	15X												
P	0009302			+ .M18	.CXM=0												
P	0009302			31B\$,11,	09X												
P	0009303			+ .M15	.CXMR3=0												
P	0009303			31B\$,06,	02X												
P	0009304			+ .M2	.CXMB0												
P	0009304			31B\$,12,	10X												
P	0009305			+ .BC2	.CXBCU												
P	0009305			31B\$,25,	30												
P	0009400		C3	=B* +.NCX0/1-0	.C3												
P	0009400			30B29X,\$,\$,28X,	29X												
P	0009401			+ .BA3	.CXBA=0												
P	0009401			30B\$,03,	15X												
P	0009402			+ .M19	.CXM=0												
P	0009402			30B\$,07,	09X												
P	0009403			+ .M16	.CXMR3=0												
P	0009403			30B\$,14,	02X												
P	0009404			+ .M3	.CXMB0												
P	0009404			30B\$,20,	10X												
P	0009405			+ .BC3	.CXBCU												
P	0009405			30B\$,24,	23												
P	0009500		C4	=B* +.NCX0/1-0	.C4												
P	0009500			30B21X,\$,\$,28X,	21X												
P	0009501			+ .BA4	.CXBA=0												
P	0009501			30B\$,13,	15X												
P	0009502			+ .M20	.CXM=0												
P	0009502			30B\$,05,	09X												
P	0009503			+ .M17	.CXMR3=0												
P	0009503			30B\$,04,	02X												
P	0009504			+ .M4	.CXMB0												
P	0009504			30B\$,08,	10X												
P	0009505			+ .BC4	.CXBCU												
P	0009505			30B\$,27,	26												

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
	0009600		C5	=B* +.NCX0/1=0	.C5												B
P	0009600			30B22X, \$, \$, 28X, 22X													B
	0009601			+ .BA5	.CXBA=0												B
P	0009601			30B\$, 17,	15X												B
	0009602			+ .M21	.CXM=0												B
P	0009602			30B\$, 11,	09X												B
	0009603			+ .M18	.CXMR3=0												B
P	0009603			30B\$, 06,	02X												B
	0009604			+ .M5	.CXM80												B
P	0009604			30B\$, 12,	10X												B
	0009605			+ .BC5	.CXBCU												B
P	0009605			30B\$, 25,	30												B
	0009700		C6	=B* +.NCX0/1=0	.C6												B
P	0009700			29B29X, \$, \$, 28X, 29X													B
	0009701			+ .BA6	.CXBA=0												B
P	0009701			29B\$, 03,	15X												B
	0009702			+ .M22	.CXM=0												B
P	0009702			29B\$, 07,	09X												B
	0009703			+ .M19	.CXMR3=0												B
P	0009703			29B\$, 14,	02X												B
	0009704			+ .C6XM6	.CXST												B
P	0009704			29B\$, 20,	10X												B
	0009705			+ .BC6	.CXBCU												B
P	0009705			29B\$, 24,	23												B
	0009800		C6XM6	=B	.NCM045	.M6											B
P	0009800			28B13, 04,	08												B
	0009900		C7	=B* +.NCX0/1=0	.C7												B
P	0009900			29B21X, \$, \$, 28X, 21X													B
	0009901			+ .BA7	.CXBA=0												B
P	0009901			29B\$, 13,	15X												B
	0009902			+ .M23	.CXM=0												B
P	0009902			29B\$, 05,	09X												B
	0009903			+ .M20	.CXMR3=0												B
P	0009903			29B\$, 04,	02X												B
	0009904			+ .C7XM7	.CXST												B
P	0009904			29B\$, 08,	10X												B
	0009905			+ .BC7	.CXBCU												B
P	0009905			29B\$, 27,	26												B
	0010000		C7XM7	=B	.NCM045	.M7											B
P	0010000			28B02, 03,	09.												B

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C.
	1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70						
	0010100		C8	=B* +.NCX0/1=0	.C8		
P	0010100			29B22X, \$, \$, 28X, 22X			
	0010101			+ .BA8	.CXBA=0		
P	0010101			29B\$, 17,	15X		
	0010102			+ .M24	.CXM=0		
P	0010102			29B\$, 11,	09X		
	0010103			+ .M21	.CXMR3=0		
P	0010103			29B\$, 06,	02X		
	0010104			+ .C8ST	.CXST		
P	0010104			29B\$, 12,	10X		
	0010105			+ .BC8	.CXBCL		
P	0010105			29B\$, 25,	30		
	0010200		C8ST	=B .BRDIN	.I1		
P	0010200			05A37, 50,	46,	41, 37-32B30T	
	0010300		C9	=B* +.NCX0/1=1	.C9		
P	0010300			27B29X, \$, \$, 28X, 29X			
	0010301			+ .BA9	.CXBA=1		
P	0010301			27B\$, 03,	15X		
	0010302			+ .M25	.CXM=1		
P	0010302			27B\$, 07,	09X		
	0010303			+ .M22	.CXMR3=1		
P	0010303			27B\$, 14,	02X		
	0010304			+ .TPE	.CXST		
P	0010304			27B\$, 20,	10X		
	0010305			+ .BC9	.CXBCL		
P	0010305			27B\$, 24,	23		
	0010400		CBA	=I .NCBA	.		
P	0010400			18C13, 04,	08, 13-07A07T		
	0010500		NCBA	=I .NH0	.NH4	.TRA1	
P	0010500			11C12, 06,	05,	07, 12-07A08T	
	0010501			I .H0	.H4	.TRA1	
P	0010501			11C33, 25,	25,	27	
	0010600		CC1	=-NFB			
P	0010600			23B26, 26-07A09T			
	0010700		NCC1	=-FB			
P	0010700			23B27, 27-07A10T			
	0010730		S/CC1	=* +.CM034			
P	0010730			23B\$, \$, 04			
	0010731			+ .GND23832	.	.	
P	0010731			23B\$, 06,	12,	08	

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0010760		R/CC1	=* +.PH12T1	.D8R	.	.	.	.	.	.	.	.	.	.	.	.FS
P	0010760			23B\$, \$, 17,	18,	19,											14
P	0010761			+ .GND23B32													
P	0010761			23B\$, 01													
P	0010800		CC2	=-NFB													
P	0010800			24B26													
P	0010900		NCC2	=-FB													
P	0010900			24B27, 27-07A11T													
P	0010920		S/CC2	=* +.CM034													
P	0010920			24B\$, \$, 04													
P	0010921			+ .CM015	.PH13T0	.BF2											
P	0010921			24B\$, 06,	12,	08											
P	0010940		R/CC2	=* +.PH12T1	.18R	.	.	.	.	.	.	.	.	.	.	.	.FS
P	0010940			24B\$, \$, 19,	17,	18,											14
P	0010941			+ .GND24B16													
P	0010941			24B\$, 01													
P	0011350		/CL1/	=-CD *CL1S													
P	0011350			14C\$, 01													
P	0011400		CL1S	=-CR #/CL1S/													
P	0011400			12C36, \$													
P	0011450		/CL1S/	=-CD *GND12C32													
P	0011450			12C\$, 35													
P	0011460		/CL1SD/	=-CR * CL1S													
P	0011460			14C\$, 01													
P	0011500		CM001	=B* +.PH1D1	.T2D1-10	.3RD	.	.	.	.	.	.	.	.	.	.	.
P	0011500			03B22, \$, \$, 20,	19,	18,											21X, 22-32B31T
P	0011501			+ .PH12T3	.	.											
P	0011501			03B\$, 11,	12												
P	0011502			+ .CM034	.	.											
P	0011502			03B\$, 07,	06												
P	0011503			+ .LS18R	.	.											
P	0011503			03B\$, 03,	09,	10,											21X
P	0011504			+ .GND03B16	.	.											
P	0011504			03B\$, 13,	05,	04X											
P	0011600		CM002	=B .PH2D2	.T1D2	.NFNT	.	.	.	.	.	.	.	.	.	.	.
P	0011600			18B34, 24,	23,	22,											28
P	0011700		CM003	=B* +.8RD	.8KWD	.	.	.	.	.	.	.	.	.	.	.	.
P	0011700			20C36, \$, \$, 26,	25, 36-15C04T												
P	0011701			+ .N8RD	.9F4	.											
P	0011701			20C\$, 29,	28,	27											

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0011800		NCM004	=I .PH102D1	.TOD1=10												B
P	0011800			17B17,01,	20X,17-07A12T												B
P	0011900		CM005	=B* +.T0RD	.0F7												B
P	0011900			20C24,\$,\$,35,	30,24-30B36T												B
P	0011901			+.NT0RD	.EH												B
P	0011901			20C0,31,	33, 34												B
P	0012000		CM006	=I .NCM006	.												B
P	0012000			02C19,03,	20X,19-26B18T												B
P	0012100		NCM006	=I .PH10D1	.NCMD												B
P	0012100			11C13,04,	08,13-13C05T												B
P	0012101			I .PH11D1	.												B
P	0012101			11C02,03,	09												B
P	0012200		CM007	=I .NEH	.TRA												B
P	0012200			01C02,03,	09,02-13C06T												B
P	0012300		NCM007	=I .CM007	.												B
P	0012300			02C10,09,10-07A13T													B
P	0012400		CM008	=B* +.BRDIN	.												B
P	0012400			06B30,\$,\$,46, 31,	29X,30-07A14T												B
P	0012401			+.ZBC	.NH6												B
P	0012401			06B0,47,	50,	29X											B
P	0012402			+.NFP	.NCBA	.ED											B
P	0012402			06B0,41,	43,	44,											B
P	0012403			+.GND06B16,	.												B
P	0012403			06B0,42,	45,	33X											B
P	0012500		CM009	=I .NCM009	.												B
P	0012500			02C18,04,	20X,18-32B33T												B
P	0012600		NCM009	=I .PH10PD1	.NCMD												B
P	0012600			11C46,40,	41,46-15C07T												B
P	0012601			I .PH11PD1	.												B
P	0012601			11C45,39,	42												B
P	0012700		CM010	=I .NCM010	.												B
P	0012700			18C46,40,	41,46-32B34T												B
P	0012800		NCM010	=I .PH12D1	.T1D1=30	.F0-											B
P	0012800			16B12,06,	05,	07,12-15C08T											B
P	0012900		NCM011	=I .PH104D1	.TOD1=20												B
P	0012900			17B41,38,	33X,41-07A15T												B
P	0013100		NCM012	=I .PH2D2	.TOD2	.CM044											B
P	0013100			19B33,26,	25,	27,33-07A18T											B

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0013200		CM013	=I	.PH10PD1	.											B
P	0013200			17A27,22,		29X,27-15C09T											B
P	0013201			I	.PH11PD1	.											B
P	0013201			17A28,21,		29X											B
P	0013202			I	.PH7PD1	.											B
P	0013202			16B35,38,		43											B
P	0013300		CM014	=8	.PH102D1	.NBUT				.T2D1=00							C
P	0013300			15B12,06,		05,				07,12=08C39T							C
P	0013400		CM015	=I*	+.N8RD	.											B
P	0013400			08A12,\$,\$,10,		09,12-15C10T											B
P	0013401			+.CC1		.											B
P	0013401			08A\$,11,		04											B
P	0013402			+.A0		.NCM015=0											B
P	0013402			08A\$,03,		02											B
P	0013500		CM015-0	=B*	+.NA7	.											B
P	0013500			29B40X,\$,\$,43X,40X=27B35T													B
P	0013501			+.0F7													B
P	0013501			29B\$,42X													B
P	0013502			I* +.NA7		.0F7											B
P	0013502			29B40X,\$,\$,43X,42X													B
P	0013503			B* +.NA6													B
P	0013503			29B39X,\$,\$,46X,													B
P	0013504			+.0F6													B
P	0013504			29B\$,45X													B
P	0013505			I* +.NA6		.0F6											B
P	0013505			29B39X,\$,\$,46X,45X													B
P	0013506			B* +.NA5													B
P	0013506			27B40X,\$,\$,43X,													B
P	0013507			+.0F5													B
P	0013507			27B\$,42X													B
P	0013508			I* +.NA5		.0F5											B
P	0013508			27B40X,\$,\$,43X,42X													B
P	0013509			B* +.NA4													B
P	0013509			27B39X,\$,\$,46X													B
P	0013510			+.0F4													B
P	0013510			27B\$,45X													B
P	0013511			I* +.NA4		.0F4											B
P	0013511			27B39X,\$,\$,46X,45X													B
P	0013600		NCM015=0	=I	.CM015=0	.											B
P	0013600			09A02,03,		09,02-07A19T											B
P	0013700		CM016	=I	.NCM016	.											B
P	0013700			27A28,21,		29X,28-15C11T											B
P	0013800		NCM016	=I	.ZBC	.BC1											B
P	0013800			09A13,04,		08,13-20A18T											B

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L
1	2	3	4	5	6	7	8
		9	10	11	12	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	43	44
			45	46	47	48	49
			50	51	52	53	54
			55	56	57	58	59
			60	61	62	63	64
			65	66	67	68	69
			70				
P	0013900		CM017	=I .NCM017			B
P	0013900			27A15,13,15-15C12T			B
P	0014000		NCM017	=I .ORDIN .I3	.BC3		B
P	0014000			09A12,06, 05,	07,12-20A19T		B
P	0014100		CM018	=I .NCM018			B
P	0014100			27A11,12,11-15C13T			B
P	0014200		NCM018	=I .ORDIN .I4	.BC5		B
P	0014200			09A33,26, 25,	27,33-20A20T		B
P	0014300		CM019	=I .NCM019			B
P	0014300			27A10,09,10-15C14T			B
P	0014400		NCM019	=I .ORDIN .I3	.EH .BC5		B
P	0014400			09A34,24, 23,	22, 28,34-20A21T		B
P	0014500		NCM020	=I .PH4D1 .T2D1-20	.NEH		C
P	0014500			19C33,26, 25,	27,33-13C13T		B
P	0014501			I .PH4D1 .T2D1-20	.MS=1		C
P	0014501			19C12,06, 05,	07		B
P	0014600		NCM021	=I .PH7PD1 .T3D1-10	.NFIN		B
P	0014600			17C12,06, 05,	07,12-13C14T		B
P	0014700		NCM022	=I .PH1D1 .T2D1-20	.NORD .NOUT		B
P	0014700			17C15,30, 18,	31, 17,15-13C18T		B
P	0014701			I .PH6D1 .T2D1-20	.NEH		B
P	0014701			17C33,26, 25,	27		B
P	0014702			I .PH14D1 .T1D1-20	.CM046 .OUT		C
P	0014702			16C15,30, 18,	31, 17		B
P	0014800		CM023	=I .MS .NMOR1			B
P	0014800			04A36,44, 37,36-15C19T			B
P	0015000		CM025	=B .B* +.CM023			B
P	0015000			28A14,\$,\$,\$,\$,13,	12,14-04B01T		B
P	0015001			+ .CM025I2 .W3 .MAR			B
P	0015001			28A\$,11, 10,	09		B
P	0015002			.CM025I1			B
P	0015002			28A08			B
P	0015100		CM025I1	=I .T9RD .CM025I1I			B
P	0015100			17C36,44, 37,36-27B36T			B
P	0015200		CM025I1I	=I .RS .RSA2			B
P	0015200			17C01,10, 11,01-13C20T			B
P	0015300		CM025I2	=B .W0 .W1 .W2			B
P	0015300			28A01,02, 04, 06,01-26B19T			B

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/I									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0015400		CM026	=I .FS	.NFSL											
P	0015400			11C35,38,	43,35-13C30T											
P	0015500		CM027	=B .CNST	.ME	.PR2										
P	0015500			03C47,43,	44,	45,										42,47-04B02T
P	0015600		CM028	=I .F1	.NFSL											
P	0015600			01C01,10,	11,01-13C34T											
P	0015601			I .CM028I2	.											
P	0015601			02C17,01,	20X											
P	0015800		CM028I2	=I .CM044	.CM023											
P	0015800			11C36,44,	37,36-13C40T											
P	0015801			I .NCM044	.RSA2											
P	0015801			11C01,10,	11											
P	0015900		NCM029	=I* +.GND20C16 .												
P	0015900			20C13,9,9,21,22,13-07A20T												
P	0015901			+ .NJ1	.NJ2	.H4										
P	0015901			20C9,18,	19,	20										
P	0015902			+ .J1	.J2	.NH4										
P	0015902			20C9,17,	15,	14										
P	0016000		CM030	=I* +.NCM004 .												
P	0016000			08A01,9,9,07,	08,01-32B35T											
P	0016001			+ .NCM029	.											
P	0016001			08A9,06,	05											
P	0016100		CM031	=B .PH1PD1	.BRDIN	.EHE										.I1
P	0016100			08A47,42,	43,	44,										45,47-07A21T
P	0016200		CM032	=B .NMPE	.NMAE	.NTPE										.NTBRD
P	0016200			21C14,21,	20,	29,										19
P	0016300		CM033	=I* +.BRD	.PH12PD1											
P	0016300			03C12,9,9,10,	09,12-04B03T											
P	0016301			+ .BRD	.PH13D1											
P	0016301			03C9,11,	04											
P	0016302			+ .BRD	.PH13PD1											
P	0016302			03C9,03,	02											
P	0016400		CM034	=B .PH2D2	.T1D2	.FNT										
P	0016400			02B14,21,	20,	29,										19,14-32B36T
P	0016500		CM035	=B .PH12T1	.F3											
P	0016500			21C01,10,	11											
P	0016600		CM036	=B .PH2D1	.T2D1-20	.NEH										.NZBS
P	0016600			21C15,30,18,	31,17,15-09C44C-09D44C-10D28T											

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70

P	0016700		CM037	=B	.PH1T2D1	.NEH		.NZBS								
	0016700				20C37,50,	46,		41,37-15C15T								
P	0016800		CM038	=B	.PH192PD1	.T4D1-10		.NBRD-1		.NBUT						
	0016800				30A47,42,	43,		44,		45,47-04B04T						
P	0016900		CM039	=B	.PH2D2	.CM044		.T102								
	0016900				02B12,06,	05,		07								
P	0017000		CM040	=I	.NED	.NCM047										
	0017000				04A02,03,	09,02-04B05T										
P	0017100		CM041	=B	.NPR2	.NMPE		.TPE								
	0017100				02B33,26,	25,		27								
P	0017200		CM042	=B	.NBRD	.BUT		.NH3		.NEH						
	0017200				02B15,30,	18,		31,		17						
P	0017300		CM043	=B	.PH10PD1	.T4D1-30		.CMD								
	0017300				02B34,24,	23,		22,		28						
P	0017400		CM044	=I	.NCM044											
	0017400				20B27,22,	29X,27-07A22T										
P	0017500		NCM044	=I	.FNT	.NFO										
	0017500				18C36,44,	37,36-20A23T										
P	0017600		CM045	=I	.NEH	.CMD										
	0017600				18C12,06,	05,		07,12-20A24T								
P	0017700		NCM045	=I	.CM045											
	0017700				20B34,40,	33X,34-29B18T										
P	0017800		CM046	=B	.NCC1	.NCC2										
	0017800				10B45,39,	42										
P	0017900		CM047	=I	.NZBS	.NEH										
	0017900				19B36,44,	37,36-04B06T										
P	0018000		NCM047	=B	.NZBS	.NEH										
	0018000				10B35,38,	43										
P	0018100		CM048	=B	.T4D1-20	.MS-1		.NAH								
	0018100				10B33,26,	25,		27,33-08C42T								
P	0018200		CM049	=I	.CM02512	.W3		.DR								
	0018200				04A14,21,	20,		29,		19,14-04B07T						
	0018201				I	.POK										
	0018201				17A11,12											

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0018250		CM050	=I	.CM049	.NMPE										
P	0018250			04A45,39,		42,45=07A44T										
P	0018300		CMD	=-FB												
P	0018300			24B20,20=15C17T												
P	0018400		NCMD	=-NFB												
P	0018400			24B22,22=07A23T												
P	0018410		S/CMD	=*	+.PH4PD1	.T3D1-10	.NEH									
P	0018410			24B\$, \$, 42,		44,	46,	50,							38	
P	0018411				+.PH4PD1	.T3D1-10	.MS-1									
P	0018411			24B\$, 39,		41,	43									
P	0018412				+.PH10T0	.M8										
P	0018412			24B\$, 45,		47										
P	0018420		R/CMD	=*	+.GND24B16	.	.									
P	0018420			24B\$, \$, 33,		28,	36,	34								
P	0018421				+.GND24B16	.	.									
P	0018421			24B\$, 31,		30,	29									
P	0018422				+.GND24B16	.	.									
P	0018422			24B\$, 35,		37										
P	0018423				+.PH2T1D2											
P	0018423			24B\$, 40												
P	0018500		CMDF	=-FBF												
P	0018500			24B24												
P	0018600		CNST	=-CR	*/CNST/											
P	0018600			12C20,\$												
P	0018610		/CNST/	=-NS												
P	0018610															
P	0018700		NCNST	=I	.CNST	.										
P	0018700			02C05,02,		20X,05=04B08T										
P	0018800		CNSTNME	=B	.CNST	.NME										
P	0018800			21C13,04,		08										
P	0018850		/CNSTNME/	=-CD	*CNSTNME											
P	0018850			12C\$,19												
P	0018900		NCBND1	=B	.ME	.NCC1	.CNST									
P	0018900			15B15,17,		18,	30,	31,								
P	0018950		/NCBND1/	=-CD	*NCBND1											
P	0018950			12C\$,25												
P	0019000		NCBND2	=B	.ME	.NCC2	.CNST									
P	0019000			15B14,19,		20,	21,	29,								

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
	1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70						
P	0019050		/NC0ND2/	=-CD *NC0ND2			
P	0019050			12C6,33			
P	0019100		CX0	=I .NCX0			
P	0019100			17B10,09,10-26B35T			
P	0019200		NCX0	=I .PH11D1	.T1D1-30		
P	0019200			16B45,39,	42,45-15C18T		
P	0019201			I .CM013	.T4D1-20		
P	0019201			16B01,10,	11		
P	0019300		NCX0/1-0	=B .NCX0	.NPH2T2D2		
P	0019300			18B13,04,	08,13-32B37T		
P	0019400		NCX0/1-1	=B .NCX0	.NPH2T2D2		
P	0019400			18B02,03,	09,02-32B38T		
P	0019500		NCXBA	=I .PH3D1	.T0D1-10		
P	0019500			17B18,04,	20X,18-15C20T		
P	0019501			I .PH4D1	.T0D1-10		
P	0019501			17B19,03,	20X		
P	0019502			I .PH10D1=1	.T2D1-00	.CMD	
P	0019502			19B34,24,	23,	22,	28
P	0019600		CXBA-0	=I .NCXBA			
P	0019600			17B15,13,15-31B18T			
P	0019700		CXBA-1	=I .NCXBA			
P	0019700			17B11,12,11-29B19T			
P	0019800		CXBCL	=I .NCM004	.NPH7T1D1	.CXBCLI	
P	0019800			19B14,21,	20,	29,	19,14-29B35T
P	0019900		CXBCLI	=I .CM006	.T2D1-00	.NF3	
P	0019900			16B14,21,	20,	29,	19,14-20A25T
P	0019901			I .PH13D1	.T0D1-10		
P	0019901			17B05,02,	20X		
P	0020000		CXBCU	=I .CXBCUI	.NCM004		
P	0020000			19B35,38,	43,35-31B19T		
P	0020100		CXBCUI	=I .PH7D1	.T1D1-30	.CM045	
P	0020100			19B15,30,	18,	31,	17,15-26B36T
P	0020200		NCXM	=I .PH5D1	.T0D1-10	.TRA	
P	0020200			17B06,14,	08,	07,06-15C21T	
P	0020201			I .CM006	.T2D1-00	.F3	
P	0020201			16B15,30,	18,	31,	17
P	0020202			I .PH6D1	.T0D1-20		
P	0020202			16B36,44,	37		

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/
1	2	3	4	5	6	7	8
P	0020300		CXM80	=B .PH7T1D1	.NCM045		
P	0020300			18B45,39,	42,45-31B35T		
P	0020400		CXMR3-0	=B .PH5D1	.TOD1-10 .NTRA		
P	0020400			18B33,26,	25, 27,33-09C45C-09D45C-10D29T		
P	0020500		CXMR3-1	=B .CXMR3-0	.		
P	0020500			18B35,38,	43,35-08C36T		
P	0020600		CXM-0	=I .NCXM	.		
P	0020600			17B27,22,	29X,27-31B36T		
P	0020700		CXM-1	=I .NCXM	.		
P	0020700			17B28,21,	29X,28-29B36T		
P	0020800		CXST	=B .PH7T1D1	.		
P	0020800			18B46,40,	41,46-04B33T		
P	0020900		DA0	=-CR */DA0/			
P	0020900			32A22,\$			
P	0020910		/DA0/	=-CD #00			
P	0020910			32A\$,23			
P	0021000		DA1	=-CR */DA1/			
P	0021000			32A20,\$			
P	0021010		/DA1/	=-CD #01			
P	0021010			32A\$,19			
P	0021100		DA2	=-CR */DA2/			
P	0021100			32A18,\$			
P	0021110		/DA2/	=-CD #02			
P	0021110			32A\$,15			
P	0021200		DA3	=-CR */DA3/			
P	0021200			32A13,\$			
P	0021210		/DA3/	=-CD #03			
P	0021210			32A\$,12			
P	0021300		DA4	=-CR */DA4/			
P	0021300			32A08,\$			
P	0021310		/DA4/	=-CD #04			
P	0021310			32A\$,03			
P	0021400		DA5	=-CR */DA5/			
P	0021400			32A10,\$			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
P	0021410		/DA5/	==CD *05													
P	0021410			32A\$,09													
P	0021500		DA6	==CR */DA6/													
P	0021500			32A04,\$													
P	0021510		/DA6/	==CD *06													
P	0021510			32A\$,01													
P	0021600		DA7	==CR */DA7/													
P	0021600			32A06,\$													
P	0021610		/DA7/	==CD *07													
P	0021610			32A\$,02													
P	0021650		DG	==CR */DGA0/													
P	0021650			14A38,\$													
P	0021655		/DGA0/	==CD *GND14A16													
P	0021655			14A\$,37													
P	0021700		DAP	==CR */DAP/													
P	0021700			32A27,\$													
P	0021701		/DAP/	==CD *0P													
P	0021701			32A\$,25													
+	0021708			==EF * +DL1PC													
P	0021800		D0R	==CR */D0R/													
P	0021800			32A38,\$													
P	0021810		/D0R/	==CD *GND32A16													
P	0021810			32A\$,37													
P	0021900		DR	==CR */DRX/													
P	0021900			10A10,\$													
P	0021910		/DRX/	==CD *GND10A32													
P	0021910			10A\$,09													
P	0022000		ED	==FB													
P	0022000			06A20													
P	0022100		NED	==NFB													
P	0022100			06A22,22-15C22T													

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L
1	2	3	4	5	6	7	8
		9	10	11	12	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	43	44
			45	46	47	48	49
			50	51	52	53	54
			55	56	57	58	59
			60	61	62	63	64
			65	66	67	68	69
			70				
P	0022110		S/ED	=* +.PH102D1 .T2D1-00	.NBRD	.CM047	.
P	0022110			06A\$, \$, 42, 44,	46,	50,	38
P	0022111			+ .PH102D1 .T1D1-00	.EDI		
P	0022111			06A\$, 39, 41,	43		
P	0022112			+ .CM030	.		
P	0022112			06A\$, 45, 47			
P	0022120		R/ED	=* +.PH2D2F .T2D2-0	.F1	.	.
P	0022120			06A\$, \$, 28, 35,	34,	33	
P	0022121			+ .GND06A16	.		
P	0022121			06A\$, 31, 30,	29		
P	0022122			+ .GND06A16	.		
P	0022122			06A\$, 37, 35			
P	0022123			+ .RESET			
P	0022123			06A\$, 40			
P	0022124		/ED/	=-CD *ED			
P	0022124			32A\$, 33			
P	0022200		EDF	=-F2F			
P	0022200			06A24			
P	0022300		EDI	=-CR */ED/			
P	0022300			32A34, \$			
P	0022400		EH	=-NFB			
P	0022400			06A23, 23-04309T			
P	0022500		NEH	=-FB			
P	0022500			06A25, 25-15C23T			
P	0022510		S/EH	=* +.EHE .TPE			
P	0022510			06A\$, \$, 15, 13			
P	0022511			+ .EHE .MPE			
P	0022511			06A\$, 11, 09			
P	0022520		R/EH	=* +.GND06A16	.		
P	0022520			06A\$, \$, 10, 02,	03		
P	0022521			+ .PH2T1D2	.		
P	0022521			06A\$, 05, 07			
P	0022600		EHE	=-FB			
P	0022600			06A27, 27-07A24T			
P	0022700		NEHE	=-NFB			
P	0022700			06A26			
P	0022710		S/EHE	=* +.PH2PD2 .T3D2	.9F5	.	.
P	0022710			06A\$, \$, 17, 18,	14,	19	
P	0022711			+ .GND06A16			
P	0022711			06A\$, 01			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0022720		R/EHE	=* +.PH2T1D2												
P	0022720			06A\$, \$, 04												
P	0022721			+ .GND06A16												
P	0022721			06A\$, 06,	12,					08						
P	0022800		NEHF	=I* +.MAE												
P	0022800			03A13, \$, \$, 21,	22											
P	0022801			+ .CMD	.MPE											
P	0022801			08A\$, 18,	19,					20						
P	0022802			+ .PH2PD2	.T3D2					.9F7						
P	0022802			08A\$, 17,	15,					14						
P	0022803			I .CM031	.T4D1-20					.NBC6						
P	0022803			08A23, 40,	38,					39						
P	0022804			I .PH5D1	.T0D1-00					.TRA				.TRA1		
P	0022804			09A15, 30,	18,					31,				17		
P	0022805			-FBF												
P	0022805			06A21X												
P	0022900		ES	==FB												
P	0022900			12B20												
P	0023000		NES	==NFB												
P	0023000			12B22												
P	0023010		S/ES	=* +.PH102D1	.T2D1-10			.N0RD		.ED			.NCM047			
P	0023010			12B\$, \$, 42,	44,			46,		50,			38			
P	0023011			+ .PH7T1D1												
P	0023011			12B\$, 39,	41,			43								
P	0023012			+ .CM030												
P	0023012			12B\$, 45,	47											
P	0023020		R/ES	=* +.PH102D1	.T2D1-10			.N0RD		.CM047						
P	0023020			12B\$, \$, 23,	36,			34,		33						
P	0023021			+ .PH2D2	.T2D2-0			.F1								
P	0023021			12B\$, 31,	30,			29								
P	0023022			+ .0RD	.PH1T2D1											
P	0023022			12B\$, 37,	35											
P	0023023			12B\$, R0SET-1												
P	0023024		1ES/	==CD *ES												
P	0023024			14C\$, 09												
P	0023100		ESF	==FBF												
P	0023100			12B24												
P	0023200		F0	==FB												
P	0023200			23C27												
P	0023300		NF0	==NFB												
P	0023300			23C26, 26-07A25T												

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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P	0023310		S/F0	=* +.FXFN	.AI9FN	.
P	0023310			23C\$, \$, 19,	17,	18,
P	0023311			+ .GND23C16		14
P	0023311			23C\$, 01		
P	0023320		R/F0	=* +.FX0		
P	0023320			23C\$, \$, 04		
P	0023321			+ .GND23C16	.	.
P	0023321			23C\$, 06,	12,	08
P	0023400		F1	=-FB		
P	0023400			24C27		
P	0023500		NF1	=-NFB		
P	0023500			24C26, 26-04B10T		
P	0023510		S/F1	=* +.PH1T2D2	.NFNT	.SC
P	0023510			24C\$, \$, 17,	18,	14,
P	0023511			+ .GND24C16		19
P	0023511			24C\$, 01		
P	0023520		R/F1	=* +.FX0		
P	0023520			24C\$, \$, 04		
P	0023521			+ .AV8	.	.
P	0023521			24C\$, 06,	12,	08
P	0023600		F2	=-FB		
P	0023600			25C27		
P	0023650		NF2	=-NFB		
P	0023650			25C26		
P	0023655		S/F2	=* +.FXFN	.NFNC0	.FNC1
P	0023655			25C\$, \$, 19,	17,	18,
P	0023656			+ .GND25C16		14
P	0023656			25C\$, 01		
P	0023660		R/F2	=* +.FX0		
P	0023660			25C\$, \$, 04		
P	0023661			+ .GND25C16	.	.
P	0023661			25C\$, 06,	12,	08
P	0023700		F3	=-FB		
P	0023700			26C27		
P	0023800		NF3	=-NFB		
P	0023800			26C26, 26-04B11T		

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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P	0023810		S/F3	=* +.FXFN	.NFNCO	.NFNC1	.NFNC2
	0023810			26C\$, \$, 19,	17,	18,	14
	0023811			+ .GND26C16			
P	0023811			26C\$, 01			
P	0023820		R/F3	=* +.FX0			
	0023820			26C\$, \$, 04			
	0023821			+ .GND26C16			
P	0023821			26C\$, 06,	12,	08	
P	0023900		F4	=-FB			
	0023900			27C27			
P	0024000		NF4	=-NFB			
	0024000			27C26			
P	0024010		S/F4	=* +.FXFN	.NFNCO	.NFNC1	.NFNC2
	0024010			27C\$, \$, 19,	17,	18,	14
	0024011			+ .GND27C16			
P	0024011			27C\$, 01			
P	0024020		R/F4	=* +.FX0			
	0024020			27C\$, \$, 04			
	0024021			+ .GND27C16			
P	0024021			27C\$, 06,	12,	08	
P	0024100		F5	=-FB			
	0024100			28C27			
P	0024200		NF5	=-NFB			
	0024200			28C26			
P	0024210		S/F5	=* +.FXFN	.NFNCO	.NFNC1	.NFNC2
	0024210			28C\$, \$, 19,	17,	18,	14
	0024211			+ .GND28C16			
P	0024211			28C\$, 01			
P	0024220		R/F5	=* +.FX0			
	0024220			28C\$, \$, 04			
	0024221			+ .GND28C16			
P	0024221			28C\$, 06,	12,	08	
P	0024300		FIN	=-NFB			
	0024300			11B23, 23-04B12T			
P	0024400		NFIN	=-FB			
	0024400			11B25, 25-15C24T			



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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS											
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	C/L

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P	0024410		S/FIN	=* +.PH14D1	.T2D1=10												
	0024410			11B\$, \$, 15,	13												
P	0024411			+ .PH7PD1	.T4D1=20												
	0024411			11B\$, 11,	09												
P	0024420		R/FIN	=* +.PH12T0	.	.											
	0024420			11B\$, \$, 10,	02,	03											
P	0024421			+ .PH1T2D1	.	.											
	0024421			11B\$, 05,	07												
P	0024500		NFINF	=I .PH3PD1	.T3D1=10	.FP											
	0024500			20C23, 40,	38,	39											
P	0024501			-F3F													
	0024501			11B21													
P	0024502			I .CM032	.PH7T1D1												
	0024502			19C36, 44,	37												
P	0024503			I .RESET	.	.											
	0024503			19C01, 10,	11												
P	0024600		FNT	=-F3													
	0024600			11B27, 27=15C25T													
P	0024700		NFNT	=-NFB													
	0024700			11B26, 26=04B13T													
P	0024710		S/FNT	=* +.PH1D2	.T0D2	.CM027	.										
	0024710			11B\$, \$, 19,	17,	18,	14										
P	0024711			+ .GND11B16													
	0024711			11B\$, 01													
P	0024720		R/FNT	=* +.RESET-1	.	.											
	0024720			11B\$, \$, 04													
P	0024721			+ .PH12T3	.	.											
	0024721			11B\$, 06,	12,	08											
P	0024800		FNC0	=-CR */FNC0/													
	0024800			12C06, \$													
P	0024810		/FNC0/	=-CD *GND12C32													
	0024810			12C\$, 02													
P	0024900		NFNC0	=I .FNC0	.	.											
	0024900			02C41, 38,	33X, 41=32B39T												
P	0025000		FNC1	=-CR */FNC1/													
	0025000			12C04, \$													
P	0025010		/FNC1/	=-CD *GND12C32													
	0025010			12C\$, 01													

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75
P	0025100		NFNC1	=I	.FNC1												
	0025100			02C35,39,	33X,35-32840T												
P	0025200		FNC2	==CR	*/FNC2/												
	0025200			12C10,\$													
P	0025210		/FNC2/	==CD	*GND12C32												
	0025210			12C5,09													
P	0025300		NFNC2	=I	.FNC2												
	0025300			02C34,40,	33X,34-32841T												
P	0025400		FP	==NFB													
	0025400			12B23,23-15C26T													
P	0025500		NFP	==FB													
	0025500			12B25,25-04B14T													
P	0025510		S/FP	=*	+PH4T0D1	.MPE											
	0025510			12B\$, \$, 15,	13												
P	0025511			+PH2T1D2	.												
	0025511			12B\$, 11,	09												
P	0025520		R/FP	=*	+PH1PD1	.T3D1-10	.N8UT										
	0025520			12B\$, \$, 10,	02,	03											
P	0025521			+PH2PD1	.T3D1-10												
	0025521			12B\$, 05,	07												
P	0025600		NFPF	=I	.FPF-0	.											
	0025600			18C02,03,	09												
P	0025601			-FBF													
	0025601			12B21													
P	0025700		FPF-0	=S	.8UT	.PH3D1	.T1D1-20	.CM032									
	0025700			20C47,42,	43,	44,	45,47-15C27T										
P	0025800		FR0	==CR	*/FR0/												
	0025800			14B22,\$													
P	0025810		/FR0/	==NS													
	0025810																
P	0025900		FR1	==CR	*/FR1/												
	0025900			14B20,\$													
P	0025910		/FR1/	==NS													
	0025910																
P	0026000		FR2	==CR	*/FR2/												
	0026000			14B18,\$													

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 1 2 8 9 10 15 20 25 30 35 40 45 50 55 60 65 70

SIGMA 1 + P S471

P	0026010		/FR2/	==NS																
P	0026010																			
P	0026100		FR3	==CR */FR3/																
P	0026100			14B13, \$																
P	0026110		/FR3/	==NS																
P	0026110																			
P	0026200		FR4	==CR */FR4/																
P	0026200			14B08, \$																
P	0026210		/FR4/	==NS																
P	0026210																			
P	0026300		FR5	==CR */FR5/																
P	0026300			14B10, \$																
P	0026310		/FR5/	==NS																
P	0026310																			
P	0026400		FR6	==CR */FR6/																
P	0026400			14B04, \$																
P	0026410		/FR6/	==NS																
P	0026410																			
P	0026500		FR7	==CR */FR7/																
P	0026500			14B06, \$																
P	0026510		/FR7/	==NS																
P	0026510																			
P	0026600		FS	==FB																
P	0026600			11B20																
P	0026700		NFS	==NFB																
P	0026700			11B22																
P	0026710		S/FS	==*	+PH10D1	•T2D1-10	•NMPE	•NPR2												
P	0026710			11B\$, 9, 42,		44,	46,	50,												38
P	0026711			+PH1PD2	•T4D2	•F1														
P	0026711			11B\$, 39,		41,	43													
P	0026712			+PH2T0D2	•F0															
P	0026712			11B\$, 45,		47														

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
				SIGMA	1-0	1-1	3-4	7-1								
P	0026720		R/FS	=* +.AV0												
P	0026720			11B\$, \$, 28,	36,	34,	33									
P	0026721			+ .PH2D2	.T2D2=0	.F1										
P	0026721			11B\$, 31,	30,	29,										
P	0026722			+ .PH12D1	.T2D1=10											
P	0026722			11B\$, 37,	35											
P	0026723			+ .RESET=1												
P	0026723			11B\$, 40												
P	0026725		/FS/	=-CD *FS												
P	0026725			14C\$, 35												
P	0026800		FSF	=-FBF												
P	0026800			11B24												
P	0026900		FSL	=-CR */FSL/												
P	0026900			14B36, \$												
P	0026910		/FSL/	=-NS												
P	0026910															
P	0027000		NFSL	=I .FSL												
P	0027000			17B26, 24,	29X, 26=04B15T											
P	0027010		/FST/	=-NS												
P	0027010															
P	0027300		FX0	=I .NPH12T4	.FX0I	.NRESET										
P	0027300			16C34, 24,	23,	22,	28, 34=30B35T									
P	0027400		FX0I	=I .PH1D1	.T1D1=20											
P	0027400			16C46, 40,	41, 46=15C28T											
P	0027500		FXFN	=B .PH1T2D2	.FNT											
P	0027500			21C35, 38,	43, 35=08C34T											
P	0027550		GND01A32	=-GND												
P	0027550			01A32												
P	0027551		GND02A16	=-GND												
P	0027551			02A16												
P	0027554		GND05A16	=-GND												
P	0027554			05A16												
P	0027555		GND06A16	=-GND												
P	0027555			06A16												
P	0027559		GND10A32	=-GND												
P	0027559			10A32, 32=05-24-41												

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75
P	0027561		GND12A16	==GND													
	0027561			12A16,16-05-24-41													
P	0027563		GND14A16	==GND													
	0027563			14A16,16-05-24-41													
P	0027565		GND16A16	==GND													
	0027565			16A16,16-05-24-41													
P	0027567		GND18A16	==GND													
	0027567			18A16,16-05-24-41													
P	0027571		GND22A16	==GND													
	0027571			22A16													
P	0027572		GND23A32	==GND													
	0027572			23A32													
P	0027574		GND25A16	==GND													
	0027574			25A16													
P	0027580		GND31A16	==GND													
	0027580			31A16													
P	0027581		GND32A16	==GND													
	0027581			32A16,16-05-24-41													
P	0027584		GND03B16	==GND													
	0027584			03B16													
P	0027587		GND06B16	==GND													
	0027587			06B16													
P	0027588		GND07B16	==GND													
	0027588			07B16													
P	0027589		GND08B16	==GND													
	0027589			08B16													
P	0027590		GND09B16	==GND													
	0027590			09B16,16-02-10-12-18-30-34-36-46													
P	0027592		GND11B16	==GND													
	0027592			11B16													
P	0027593		GND12B16	==GND													
	0027593			12B16													
P	0027595		GND14B16	==GND													
	0027595			14B16,16-01-02-03-05-09-12-15-19-23-24-25-33-35-37													

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0027640		GND27C16	=-GND												
	0027640			27C16												
P	0027641		GND28C16	=-GND												
	0027641			28C16												
P	0027642		GND29C16	=-GND												
	0027642			29C16												
P	0027643		GND30C16	=-GND												
	0027643			30C16												
P	0027647		GND05D16	=-GND												
	0027647			05D16												
P	0027648		GND01D16	=-GND												
	0027648			01D16, 16-01-02-03-05-09-12-15-24-25-33-35-37-39-41-45												
P	0027652		GND07D16	=-GND												
	0027652			07D16												
P	0027656		GND11D16	=-GND												
	0027656			11D16, 16-10-24-38												
P	0027657		GND12D16	=-GND												
	0027657			12D16, 16-10-24-38												
P	0027658		GND13D16	=-GND												
	0027658			13D16, 16-10-24-38												
P	0027659		GND14D16	=-GND												
	0027659			14D16, 16-10-24-38												
P	0027660		GND15D16	=-GND												
	0027660			15D16, 16-10-24-38												
P	0027661		GND16D16	=-GND												
	0027661			16D16, 16-10-24-38												
P	0027662		GND17D16	=-GND												
	0027662			17D16, 16-10-24-38												
P	0027663		GND18D16	=-GND												
	0027663			18D16, 16-10-24-38												
P	0027664		GND19D16	=-GND												
	0027664			19D16, 16-10-24-38												
P	0027665		GND20D16	=-GND												
	0027665			20D16, 16-10-24-38												

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	
P	0027666		GND21D16	==GND			
P	0027666			21D16, 16-10-24-38			
P	0027667		GND22D16	==GND			
P	0027667			22D16, 16-10-24-38			
P	0027668		GND23D16	==GND			
P	0027668			23D16, 16-10-24-38			
P	0027669		GND24D16	==GND			
P	0027669			24D16, 16-10-24-38			
P	0027670		GND25D16	==GND			
P	0027670			25D16, 16-10-24-38			
P	0027671		GND26D16	==GND			
P	0027671			26D16, 16-10-24-38			
P	0027672		GND27D16	==GND			
P	0027672			27D16, 16-10-24-38			
P	0027673		GND28D16	==GND			
P	0027673			28D16, 16-10-24-38			
P	0027674		GND29D16	==GND			
P	0027674			29D16, 16-10-24-38			
P	0027675		GND30D16	==GND			
P	0027675			30D16, 16-10-24-38			
P	0027700		HO	==NFB			
P	0027700			23C22, 22-10D18T-31C35C-31D35C			
P	0027800		NHO	==FB			
P	0027800			23C20, 20-15C29T			
P	0027810		S/HO	** +.HXJM1	.NJ2	.NJ1	.NJ0
P	0027810			23C\$, \$, 23,	36,	34,	33
P	0027811			+ .HXJP1	.J1AJ2	.NJ0	
P	0027811			23C\$, 31,	30,	29	
P	0027812			+ .HUXM	.M29		
P	0027812			23C\$, 37,	35		
P	0027813			+ .GND23C16			
P	0027813			23C\$, 40			
P	0027820		R/HO	** +.HXJM1	.NJ2	.NJ1	.JO
P	0027820			23C\$, \$, 42,	44,	46,	50,
P	0027821			+ .HXJP1	.J1AJ2	.JO	
P	0027821			23C\$, 39,	41,	43	
P	0027822			+ .HUXO	.		
P	0027822			23C\$, 45,	47		

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	3	4	5	6
	7	8	9	10	11	12
	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
	43	44	45	46	47	48
	49	50	51	52	53	54
	55	56	57	58	59	60
	61	62	63	64	65	66
	67	68	69	70	71	72
	73	74	75	76	77	78
	79	80	81	82	83	84
	85	86	87	88	89	90
	91	92	93	94	95	96
	97	98	99	100	101	102
	103	104	105	106	107	108
	109	110	111	112	113	114
	115	116	117	118	119	120
	121	122	123	124	125	126
	127	128	129	130	131	132
	133	134	135	136	137	138
	139	140	141	142	143	144
	145	146	147	148	149	150
	151	152	153	154	155	156
	157	158	159	160	161	162
	163	164	165	166	167	168
	169	170	171	172	173	174
	175	176	177	178	179	180
	181	182	183	184	185	186
	187	188	189	190	191	192
	193	194	195	196	197	198
	199	200	201	202	203	204
	205	206	207	208	209	210
	211	212	213	214	215	216
	217	218	219	220	221	222
	223	224	225	226	227	228
	229	230	231	232	233	234
	235	236	237	238	239	240
	241	242	243	244	245	246
	247	248	249	250	251	252
	253	254	255	256	257	258
	259	260	261	262	263	264
	265	266	267	268	269	270
	271	272	273	274	275	276
	277	278	279	280	281	282
	283	284	285	286	287	288
	289	290	291	292	293	294
	295	296	297	298	299	300

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SDS

SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	8	9	10	15 20 25 30 35 40 45 50 55 60 65 70
	1	2	8	9	10	15 20 25 30 35 40 45 50 55 60 65 70
P	0028420		R/H2	=* +.HXJM1	.J2	.
P	0028420			25C\$, \$, 42,	44,	46, 50, 38
P	0028421			+ .HXJP1	.J2	.
P	0028421			25C\$, 39,	41,	43
P	0028422			+ .HXJ0	.	.
P	0028422			25C\$, 45,	47	
P	0028500		NH2F	=1* +.HX8F	.8F2	.
P	0028500			20C12, \$, \$, 10,	09	
P	0028501			+ .CM019	.9XT0RD	
P	0028501			20C\$, 11,	04	
P	0028502			+ .CM018	.9XT0RD	
P	0028502			20C\$, 03,	02	
P	0028503			-FBF		
P	0028503			25C24		
P	0028600		H3	=-FB		
P	0028600			26C25, 25-10021T-31C38C-31038C		
P	0028700		NH3	=-NFB		
P	0028700			26C23, 23-04H18T		
P	0028710		S/H3	=* +.PH6T0D1	.M7	.
P	0028710			26C\$, \$, 10,	02,	03
P	0028711			+ .HX8F	.8F3	
P	0028711			26C\$, 05,	07	
P	0028720		R/H3	=* +.HX0	.	.
P	0028720			26C\$, \$, 15,	13	
P	0028721			+ .GND26C16	.	.
P	0028721			26C\$, 11,	09	
P	0028800		H3F	=-FBF		
P	0028800			26C21		
P	0028900		H4	=-NFB		
P	0028900			27C23, 23-10022T-31C39C-31039C		
P	0029000		NH4	=-FB		
P	0029000			27C25, 25-15C30T		
P	0029010		S/H4	=* +.PH13T0	.A4	.
P	0029010			27C\$, \$, 15,	13	
P	0029011			+ .HX8F	.8F4	
P	0029011			27C\$, 11,	09	
P	0029020		R/H4	=* +.HX0	.	.
P	0029020			27C\$, \$, 05,	07	
P	0029021			+ .GND27C16	.	.
P	0029021			27C\$, 10,	02,	03

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	3	4	5	6
	8	9	10	15	20	25
	30	35	40	45	50	55
	60	65	70	75	80	85
	90	95	100	105	110	115
	120	125	130	135	140	145
	150	155	160	165	170	175
	180	185	190	195	200	205
	210	215	220	225	230	235
	240	245	250	255	260	265
	270	275	280	285	290	295
	300	305	310	315	320	325
	330	335	340	345	350	355
	360	365	370	375	380	385
	390	395	400	405	410	415
	420	425	430	435	440	445
	450	455	460	465	470	475
	480	485	490	495	500	505
	510	515	520	525	530	535
	540	545	550	555	560	565
	570	575	580	585	590	595
	600	605	610	615	620	625
	630	635	640	645	650	655
	660	665	670	675	680	685
	690	695	700	705	710	715
	720	725	730	735	740	745
	750	755	760	765	770	775
	780	785	790	795	800	805
	810	815	820	825	830	835
	840	845	850	855	860	865
	870	875	880	885	890	895
	900	905	910	915	920	925
	930	935	940	945	950	955
	960	965	970	975	980	985
	990	995	1000	1005	1010	1015

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0029100 NH4F =1 CM003 PH6TOD1
P 0029100 19C46,40, 41
0029101 -FBF
P 0029101 27C21

0029200 H5 =-FB
P 0029200 28C20,20-10D23T-31C40C-31D40C

0029300 NH5 =-NFB
P 0029300 28C22

0029310 S/H5 =* +.PH13T0 .A5 . . .
P 0029310 28C$, $, 42, 44, 46, 50, 38
0029311 +.PH6TOD1 .M4 .
P 0029311 28C$, 39, 41, 43
0029312 +.HJX8F .9F5
P 0029312 28C$, 45, 47

0029320 R/H5 =* +.GND28C16 . . .
P 0029320 28C$, $, 28, 36, 34, 33
0029321 +.GND28C16 . .
P 0029321 28C$, 31, 30, 29
0029322 +.GND28C16 .
P 0029322 28C$, 37, 35
0029323 +.HX0
P 0029323 28C$, 40

0029400 H5F =-FBF
P 0029400 28C24

0029500 H6 =-FB
P 0029500 29C20,20-10D24T-31C41C-31D41C

0029600 NH6 =-NFB
P 0029600 29C22,22-04619T

0029610 S/H6 =* +.PH13T0 .A6 . . .
P 0029610 29C$, $, 42, 44, 46, 50, 38
0029611 +.PH6TOD1 .M0 .
P 0029611 29C$, 39, 41, 43
0029612 +.HJX8F .8F6
P 0029612 29C$, 45, 47

0029620 R/H6 =* +.GND29C16 . . .
P 0029620 29C$, $, 28, 36, 34, 33
0029621 +.GND29C16 . .
P 0029621 29C$, 31, 30, 29
0029622 +.GND29C16 .
P 0029622 29C$, 37, 35
0029623 +.HX0
P 0029623 29C$, 40
    
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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	3	4	5	6
	8	9	10	11	12	13
	15	16	17	18	19	20
	25	26	27	28	29	30
	35	36	37	38	39	40
	45	46	47	48	49	50
	55	56	57	58	59	60
	65	66	67	68	69	70
	8	9	10	11	12	13
P	0029700		H6F	==FBF		
P	0029700			29C24		
P	0029800		H7	==FB		
P	0029800			30C25, 25-10, 025T-31C42C-31D42C		
P	0029900		NH7	==NFB		
P	0029900			30C23		
P	0029910		S/H7	.* +.PH7T1D1	.CM005	.
P	0029910			30C\$, \$, 10,	02,	03
P	0029911			+ .PH13T0	.A7	.
P	0029911			30C\$, 05,	07	
P	0029920		R/H7	.* +.HX0	.	.
P	0029920			30C\$, \$, 15,	13	
P	0029921			+ .GND30C16	.	.
P	0029921			30C\$, 11,	09	
P	0030000		H7F	==FBF		
P	0030000			30C21		
P	0030050		/HI9/	==CD *F2		
P	0030050			14C\$, 15		
P	0030100		HJX0F	=I .NHJX0F	.NPH7T1D1	.
P	0030100			15C13, 04,	02, 13-32B42T	
P	0030200		NHJX0F	=I .PH1PD1	.T3D1-10	.0UT
P	0030200			15C33, 26,	25,	27, 33-15C31T
P	0030201			I .PH2PD2	.T3D2	.F1
P	0030201			15C12, 06,	05,	07
P	0030300		HUX0	=I .HUX0I	.HX0I	.NCM020
P	0030300			19C14, 21,	20,	29, 19, 14-15C33T
P	0030400		HUX0I	=I .PH1D1	.T2D1-20	.0UT
P	0030400			19C15, 30,	18,	31, 17, 15-15C34T
P	0030500		HUXM	=B .PH5D1-1	.T0D1-30	.NTRA
P	0030500			21C34, 24,	23,	22, 28, 34-15C35T
P	0030600		HX0	=I .NCM020	.NPH2T2D2	.HX0I
P	0030600			19C34, 24,	23,	22, 28, 34-32B43T
P	0030700		HX0I	=I .PH7D1	.T0D1-30	.
P	0030700			19C13, 04,	08, 13-15C36T	
P	0030701			I .PH13PD1	.T4D1-20	.
P	0030701			19C02, 03,	09	

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70

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P	0030900		HXJM1	=B	.PH102D1	.T1D1-30	.H4									
	0030900				21C33,25,	25,	27,33-15C37T									
P	0031000		HXJP1	=B	.PH192D1	.T1D1-30	.NH4									
	0031000				21C12,06,	05,	07,12-15C38T									
P	0031100		I0	=B*	+.NIX0	.I0										
	0031100				26A26X,\$,\$,23X,26X,26X-04820T											
	0031101				+.DA0	.IXDA										
P	0031101				26A\$,25,	18X										
	0031102				+.IMB0	.IXMB										
P	0031102				26A\$,24,	22X										
P	0031200		NIO	=I	.I0	.										
	0031200				27A45,43,	50X,45-20A26T										
P	0031300		I02EVEN	=B*	+.NIO	.NI1	.NI2									
	0031300				28A33X,\$,\$,43X,41X,	40X										
	0031301				+.NI2	.I1										
P	0031301				28A\$,40X,	38X										
	0031302				+.I0	.I2	.NI1									
P	0031302				28A\$,39X,	36X,	41X									
	0031303				+.NIO	.I1	.I2									
P	0031303				28A\$,43X,	38X,	36X									
P	0031400		NIO2EVEN	=I	.I02EVEN	.										
	0031400				28A35,33X											
P	0031500		I1	=B*	+.NIX0	.I1										
	0031500				26A27X,\$,\$,23X,27X											
	0031501				+.DA1	.IXDA										
P	0031501				26A\$,28,	18X										
	0031502				+.IMB1	.IXMB										
P	0031502				26A\$,29,	22X										
P	0031600		NI1	=I	.I1	.										
	0031600				27A44,42,	50X,44-20A27T										
P	0031700		I2	=B*	+.NIX0	.I2										
	0031700				26A12X,\$,\$,23X,12X											
	0031701				+.DA2	.IXDA										
P	0031701				26A\$,11,	18X										
	0031702				+.IMB2	.IXMB										
P	0031702				26A\$,10,	22X										
P	0031800		NI2	=I	.I2	.										
	0031800				27A46,30,	50X,46-20A28T										

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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P	0032900		I68EVEN	=B* +.NI6	.NI7	.NIP
	0032900			28A31X, \$, \$, 23X, 22X,		24X
	0032901			+ .NIP	.I7	.I6
P	0032901			28A\$, 24X,	26X,	25X
	0032902			+ .I6	.IP	.NI7
P	0032902			28A\$, 25X,	27X,	22X
	0032903			+ .NI6	.I7	.IP
P	0032903			28A\$, 23X,	26X,	27X
	0033000		NI68EVEN	=I .I68EVEN		
P	0033000			28A29, 31X		
	0033100		I7	=B* +.NIX0	.I7	
P	0033100			26A07X, \$, \$, 30X, 07X		
	0033101			+ .DA7	.IXDA	
P	0033101			26A\$, 04,	13X	
	0033102			+ .IMB7	.IXMB	
P	0033102			26A\$, 03,	05X	
	0033200		NI7	=I .I7		
P	0033200			27A34, 40,	33X, 34-20A34T	
	0033300		IC	=-CR */IC/		
P	0033300			14B40, \$		
	0033310		/IC/	=-NS		
P	0033310					
	0033400		IEVEN	=B* +.I02EVEN .I35EVEN .I68EVEN		
P	0033400			28A30X, \$, \$, 21X, 18X,		15X
	0033401			+ .I68EVEN .NI35EVEN .NI02EVEN		
P	0033401			28A\$, 15X,	19X,	17X
	0033402			+ .NI02EVEN .NI68EVEN .I35EVEN		
P	0033402			28A\$, 17X,	20X,	18X
	0033403			+ .NI68EVEN .NI35EVEN .I02EVEN		
P	0033403			28A\$, 20X,	19X,	21X
	0033500		IMBO	=B* +.GND25A16 .IMBO		
P	0033500			25A37X, \$, \$, 27X, 37X		
	0033501			+ .M0	.IXMB0	
P	0033501			25A\$, 45,	30X	
	0033502			+ .M8	.IXMB1	
P	0033502			25A\$, 46,	31X	
	0033503			+ .M16	.IXMB2	
P	0033503			25A\$, 47,	29X	
	0033504			+ .M24	.IXMB3	
P	0033504			25A\$, 50,	28X	

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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P	0033600		IMB1	=B* +.GND25A16	.IMB1	
P	0033600			25A33X, \$, \$, 27X, 33X		
P	0033601			+ .M1	.IXMB0	
P	0033601			25A\$, 26,	30X	
P	0033602			+ .M9	.IXMB1	
P	0033602			25A\$, 25,	31X	
P	0033603			+ .M17	.IXMB2	
P	0033603			25A\$, 24,	29X	
P	0033604			+ .M25	.IXMB3	
P	0033604			25A\$, 23,	28X	
P	0033700		IMB2	=B* +.GND25A16	.IMB2	
P	0033700			25A34X, \$, \$, 27X, 34X		
P	0033701			+ .M2	.IXMB0	
P	0033701			25A\$, 41,	30X	
P	0033702			+ .M10	.IXMB1	
P	0033702			25A\$, 40,	31X	
P	0033703			+ .M18	.IXMB2	
P	0033703			25A\$, 43,	29X	
P	0033704			+ .M26	.IXMB3	
P	0033704			25A\$, 44,	28X	
P	0033800		IMB3	=B* +.GND25A16	.IMB3	
P	0033800			25A35X, \$, \$, 27X, 35X		
P	0033801			+ .M3	.IXMB0	
P	0033801			25A\$, 42,	30X	
P	0033802			+ .M11	.IXMB1	
P	0033802			25A\$, 39,	31X	
P	0033803			+ .M19	.IXMB2	
P	0033803			25A\$, 36,	29X	
P	0033804			+ .M27	.IXMB3	
P	0033804			25A\$, 38,	28X	
P	0033900		IMB4	=B* +.GND25A16	.IMB4	
P	0033900			25A18X, \$, \$, 17X, 18X		
P	0033901			+ .M4	.IXMB0	
P	0033901			25A\$, 19,	30X	
P	0033902			+ .M12	.IXMB1	
P	0033902			25A\$, 20,	31X	
P	0033903			+ .M20	.IXMB2	
P	0033903			25A\$, 21,	29X	
P	0033904			+ .M28	.IXMB3	
P	0033904			25A\$, 22,	28X	

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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P	0034000		IMB5	=B* +.GND25A16 +IMB5		
P	0034000			25A13X, \$, \$, 17X, 13X		
P	0034001			+ .M5		.IXMB0
P	0034001			25A\$, 04,		30X
P	0034002			+ .M13		.IXMB1
P	0034002			25A\$, 03,		31X
P	0034003			+ .M21		.IXMB2
P	0034003			25A\$, 02,		29X
P	0034004			+ .M29		.IXMB3
P	0034004			25A\$, 01,		28X
P	0034100		IMB6	=B* +.GND25A16 +IMB6		
P	0034100			25A14X, \$, \$, 17X, 14X		
P	0034101			+ .M6		.IXMB0
P	0034101			25A\$, 07,		30X
P	0034102			+ .M14		.IXMB1
P	0034102			25A\$, 08,		31X
P	0034103			+ .M22		.IXMB2
P	0034103			25A\$, 12,		29X
P	0034104			+ .M30		.IXMB3
P	0034104			25A\$, 05,		28X
P	0034200		IMB7	=B* +.GND25A16 +IMB7		
P	0034200			25A15X, \$, \$, 17X, 15X		
P	0034201			+ .M7		.IXMB0
P	0034201			25A\$, 06,		30X
P	0034202			+ .M15		.IXMB1
P	0034202			25A\$, 10,		31X
P	0034203			+ .M23		.IXMB2
P	0034203			25A\$, 11,		29X
P	0034204			+ .M31		.IXMB3
P	0034204			25A\$, 09,		28X
P	0034300		I0PA0	=-CR */I0PA0/		
P	0034300			12C08, \$		
P	0034310		/I0PA0/	=-CD *GND12C32		
P	0034310			12C\$, 03		
P	0034350		NI0PA0	=I* +.I0PA0		
P	0034350			13C42X, \$, \$, 44X		
P	0034400		I0PA1	=-CR */I0PA1/		
P	0034400			12C13, \$		
P	0034410		/I0PA1/	=-CD *GND12C32		
P	0034410			12C\$, 12		
P	0034450		NI0PA1	=I* +.I0PA1		
P	0034450			13C25X, \$, \$, 26X		

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
P	0034500		I0PA2	=-CR */I0PA2/ 12C18,\$		
P	0034510		/I0PA2/	=-CD *GND12C32 12C\$,15		
P	0034550		NIOPA2	=I* +.I0PA2 13C22X,\$\$,17X		
P	0034600		I0R	=-CR */I0R/ 14B34,\$		
P	0034610		/I0R/	=-NS		
P	0034700		IP	=B* +.NIXO .IP 30A24,\$\$,35,30,24-30B18T +.IXDA .JAP 30A\$,31, 33, 34		
P	0034800		NIP	=I .IP 27A26,24, 29X,26-20A35T		
P	0034900		IR	=-FB 12B27		
P	0035000		NIR	=-NFB 12B26		
P	0035010		S/IR	=* +.CM033 .NA18FN .IC 12B\$,19, 17, 18, 14 +.GND12B16 12B\$,01		
P	0035020		R/IR	=* +.RESET-1 12B\$,04 +.PH12PD1 .ORD 12B\$,06, 12, 08		
P	0035030		/IR/	=-CD *IR 12C\$,39		
P	0035100		NIXO	=I* +.PH4PD1 .T3D1-00 30A12,\$\$,10, 09,12-20A36T +.PH2D2 .T2D2-0 30A\$,11, 04 +.N8UT .PH2T0D1 30A\$,03, 02 I .8UT .T3D1-00 .PH182PD1 30A23,40, 38, 39		

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
P	0035200		IXDA	=I .IXDAI .NCM010		
P	0035200			11A13,04, 08,13-32344T		
P	0035300		IXDAI	=I .PH102D1 .T101=00 .NOUT		
P	0035300			11A33,26, 25, 27,33-07A28T		
P	0035400		IXMB	=-FB		
P	0035400			05A20,20-20A37T		
P	0035500		MIXMB	=-NFB		
P	0035500			05A22		
P	0035510		S/IXMB	.* +.PH102PD1 .T3D1=00 .BUT .		
P	0035510			05A\$,3,42, 44, 46, 50, 38		
P	0035511			+ .PH2PD2 .T3D2 .CM044		
P	0035511			05A\$,39, 41, 43		
P	0035512			+ .PH4PD1 .T3D1=00		
P	0035512			05A\$,43, 47		
P	0035520		R/IXMB	.* +.GND05A16 .		
P	0035520			05A\$,3,28, 36, 34, 33		
P	0035521			+ .GND05A16 .		
P	0035521			05A\$,31, 30, 29,		
P	0035522			+ .PH2T1D2 .		
P	0035522			05A\$,37, 35		
P	0035523			+ .T3D1=00		
P	0035523			05A\$,40		
P	0035600		IXMBO	=B .NH1 .NH2		
P	0035600			13A45,39, 42		
P	0035700		IXMB1	=B .NH1 .H2		
P	0035700			13A46,40, 41		
P	0035800		IXMB2	=B .NH2 .H1		
P	0035800			13A02,09, 03		
P	0035900		IXMB3	=B .H1 .H2		
P	0035900			13A13,04, 08		
P	0036000		IXMBF	=-FBF		
P	0036000			05A24		
P	0036100		JO	=-FB		
P	0036100			23C25,25-04821T		
P	0036200		NJO	=-NFB		
P	0036200			23C23,23-15C39T		

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SDS

SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0036210		S/J0	=* +.JXH	.H0											
P	0036210			23C\$, \$, 10,	02,	03,										
P	0036211			+ .HJX0F	.0F0											
P	0036211			23C\$, 05,	07											
P	0036220		R/J0	=* +.PH2T2D2	.											
P	0036220			23C\$, \$, 15,	13											
P	0036221			+ .JXH	.NH0											
P	0036221			23C\$, 11,	09											
P	0036300		J0F	=-FBF												
P	0036300			23C21												
P	0036400		J1	=-FB												
P	0036400			24C25, 25-07A29T												
P	0036500		NJ1	=-NFB												
P	0036500			24C23, 23-07A30T												
P	0036510		S/J1	=* +.JXH	.H1											
P	0036510			24C\$, \$, 10,	02,	03,										
P	0036511			+ .HJX0F	.0F1											
P	0036511			24C\$, 05,	07											
P	0036520		R/J1	=* +.PH2T2D2	.											
P	0036520			24C\$, \$, 15,	13											
P	0036521			+ .JXH	.NH1											
P	0036521			24C\$, 11,	09											
P	0036600		J1AJ2	=B .J1	.J2											
P	0036600			21C36, 44,	37											
P	0036700		J1F	=-FBF												
P	0036700			24C21												
P	0036800		J2	=-FB												
P	0036800			25C25, 25-07A31T												
P	0036900		NJ2	=-NFB												
P	0036900			25C23, 23-07A33T												
P	0036910		S/J2	=* +.JXH	.H2											
P	0036910			25C\$, \$, 10,	02,	03,										
P	0036911			+ .HJX0F	.0F2											
P	0036911			25C\$, 05,	07											
P	0036920		R/J2	=* +.PH2T2D2	.											
P	0036920			25C\$, \$, 15,	13											
P	0036921			+ .JXH	.NH2											
P	0036921			25C\$, 11,	09											

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C/L

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0037000		J2F	=-FBF												
P	0037000			25C21												
P	0037100		JXH	=B .PH102PD1 .T401-10												
P	0037100			21C46,45, 41												
P	0037150		K0	=B* +.C2 .C1 .K2												
P	0037150			31B31X,\$,\$,22X,21X, 44X												
P	0037151			+ .SUB-4 .K2												
P	0037151			31B\$,47X, 44X												
P	0037152			I* +.C2 .SUB-4												
P	0037152			31B31X,\$,\$,22X,47X												
P	0037153			+ .C1 .SUB-4												
P	0037153			31B\$,21X, 47X												
P	0037200		K1	=B* +.C2 .K2												
P	0037200			31B41X,\$,\$,22X,44X												
P	0037201			+ .SUB-4 .K2												
P	0037201			31B\$,47X, 44X												
P	0037202			I* +.C2 .SUB-4												
P	0037202			31B41X,\$,\$,22X,47X												
P	0037300		K10	=B* +.C11 .K11												
P	0037300			27B41X,\$,\$,22X,44X												
P	0037301			+ .SUB-1 .K11												
P	0037301			27B\$,47X, 44X												
P	0037302			I* +.C11 .SUB-1												
P	0037302			27B41X,\$,\$,22X,47X												
P	0037400		K11	=B .KP12T14 .KP15 .K15												
P	0037400			28B12,06, 05, 07												
P	0037450		K12	=B* +.C14 .C13 .K14												
P	0037450			26B31X,\$,\$,22X,21X, 44X												
P	0037451			+ .SUB .K14												
P	0037451			26B\$,47X, 44X												
P	0037452			I* +.C14 .SUB												
P	0037452			26B31X,\$,\$,22X,47X												
P	0037453			+ .C13 .SUB												
P	0037453			26B\$,21X, 47X												
P	0037500		K13	=B* +.C14 .K14												
P	0037500			26B41X,\$,\$,22X,44X												
P	0037501			+ .SUB .K14												
P	0037501			26B\$,47X, 44X												
P	0037502			I* +.C14 .SUB												
P	0037502			26B41X,\$,\$,22X,47X												
P	0037600		K14	=B .KP15 .K15												
P	0037600			28B36,44, 37												

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SCIENTIFIC DATA SYSTEMS
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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
P	0037700		K15	=-FB 23B20, 20=32B45T		
P	0037800		NK15	=-NFB 23B22, 22=30B19P		
P	0037810		S/K15	=* +.PH5PD1 .T4D1=10 .TRA 23B\$, 3, 42, 44, 46, 50, 38 +.PH2T2D2 . 23B\$, 39, 41, 43 +.GND23B32 . 23B\$, 45, 47		
P	0037820		R/K15	=* +.PH4PD1 .T4D1=10 .MS-1 23B\$, \$, 28, 36, 34, 33 +.PH7D1 .T0D1=10 . 23B\$, 31, 30, 29 +.CM006 .T2D1=00 23B\$, 37, 35 +.PH12T0 23B\$, 40		
P	0037900		K15F	=-FBF 23B24		
P	0038000		K2	=B .KP3T5 .KP6T8 .KP9T11 .KP12T14 28B15, 30, 13, 31, 17 B .KP15 .K15 28B45, 39, 42		
P	0038050		K3	=B* +.C5 .C4 .K5 30B31X, \$, \$, 22X, 21X, 44X +.SUB=3 .K5 30B\$, 47X, 44X I* +.C5 .SUB=3 30B31X, \$, \$, 22X, 47X +.C4 .SUB=3 30B\$, 21X, 47X		
P	0038100		K4	=B* +.C5 .K5 30B41X, \$, \$, 22X, 44X +.SUB=3 .K5 30B\$, 47X, 44X I* +.C5 .SUB=3 30B41X, \$, \$, 22X, 47X		
P	0038200		K5	=B .KP6T8 .KP9T11 .KP12T14 28B33, 26, 25, 27 B .KP15 .K15 28B35, 38, 43		

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
				SIGMA 1-0-0-3771												
P	0038250		K6	=B* +.C8	.C7	.K8										
P	0038250			29B31X, \$, \$, 22X, 21X,		44X										
P	0038251			+ .SUB-2	.K8											
P	0038251			29B\$, 47X,	44X											
P	0038252			I* +.C8	.SUB-2											
P	0038252			29B31X, \$, \$, 22X, 47X												
P	0038253			+ .C7	.SUB-2											
P	0038253			29B\$, 21X,	47X											
P	0038300		K7	=B* +.C8	.K8											
P	0038300			29B41X, \$, \$, 22X, 44X												
P	0038301			+ .SUB-2	.K8											
P	0038301			29B\$, 47X,	44X											
P	0038302			I* +.C8	.SUB-2											
P	0038302			29B41X, \$, \$, 22X, 47X												
P	0038400		K8	=B .KP9T11	.KP12T14	.KP15										
P	0038400			28B14, 21,	20,	29,										
P	0038450		K9	=B* +.C11	.C10	.K11										
P	0038450			27B31X, \$, \$, 22X, 21X,		44X										
P	0038451			+ .SUB-1	.K11											
P	0038451			27B\$, 47X,	44X											
P	0038452			I* +.C11	.SUB-1											
P	0038452			27B31X, \$, \$, 22X, 47X												
P	0038453			+ .C10	.SUB-1											
P	0038453			27B\$, 21X,	47X											
P	0038500		KPOT2	=B* +.C2	.C1	.C0										
P	0038500			31B33X, \$, \$, 22X, 21X,		29X,										
P	0038501			+ .SUB-4	.											
P	0038501			31B\$, 47X,	01X											
P	0038502			I* +.C2	.SUB-4											
P	0038502			31B33X, \$, \$, 22X, 47X												
P	0038503			+ .C1	.SUB-4											
P	0038503			31B\$, 21X,	47X											
P	0038504			+ .C0	.SUB-4											
P	0038504			31B\$, 29X,	47X											
P	0038600		KP12T14	=B* +.C14	.C13	.C12										
P	0038600			26B33X, \$, \$, 22X, 21X,		29X,										
P	0038601			+ .SUB	.											
P	0038601			26B\$, 47X,	01X											
P	0038602			I* +.C14	.SUB											
P	0038602			26B33X, \$, \$, 22X, 47X												
P	0038603			+ .C13	.SUB											
P	0038603			26B\$, 21X,	47X											
P	0038604			+ .C12	.SUB											
P	0038604			26B\$, 29X,	47X											

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
				Original 1-6-67 2471												
P	0038700		KP15	=B* +.NSUBF												
P	0038700			26B40X, \$, \$, 43X, 40X-32B46T												
	0038701			+ .NC15F												
P	0038701			26B\$, 42X												
P	0038702			I* +.NSUBF												
P	0038702			26B40X, \$, \$, 43X, 42X												
P	0038800		KP375	=B* +.C5												
P	0038800			30B33X, \$, \$, 22X, 21X,												
	0038801			+ .SUB-3												
P	0038801			30B\$, 47X,												
	0038802			I* +.C5												
P	0038802			30B33X, \$, \$, 22X, 47X												
	0038803			+ .C4												
P	0038803			30B\$, 21X,												
	0038804			+ .C3												
P	0038804			30B\$, 29X,												
P	0038900		KP6T8	=B* +.C8												
P	0038900			29B33X, \$, \$, 22X, 21X,												
	0038901			+ .SUB-2												
P	0038901			29B\$, 47X,												
	0038902			I* +.C8												
P	0038902			29B33X, \$, \$, 22X, 47X												
	0038903			+ .C7												
P	0038903			29B\$, 21X,												
	0038904			+ .C6												
P	0038904			29B\$, 29X,												
P	0039000		KP9T11	=B* +.C11												
P	0039000			27B33X, \$, \$, 22X, 21X,												
	0039001			+ .SUB-1												
P	0039001			27B\$, 47X,												
	0039002			I* +.C10												
P	0039002			27B33X, \$, \$, 21X, 47X												
	0039003			+ .C9												
P	0039003			27B\$, 29X,												
P	0039050		LASTONE	=-SC												
P	0039050			13C43												
P	0039075		NLASTONE	=-SC												
P	0039075			13C28												
P	0039100		LSO	=-FB												
P	0039100			26C20, 20-23D07T-31C45C-31D45C												
P	0039200		NLSO	=-NF6												
P	0039200			26C22												

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
			SIGMA 1-0-P-8771													
P	0039210		S/LS0	=*	+ .PH182PD1	.T3D1-10	.Z3C	.	.							
	0039210			26C	\$, \$, 42,	44,	46,	50,	38							
P	0039211				+ .PH1T2D1	.ARD	.	.								
	0039211			26C	\$, 39,	41,	43									
P	0039212				+ .CM034	.	.									
	0039212			26C	\$, 45,	47										
P	0039220		R/LS0	=*	+ .PH5D1-1	.T0D1-30	.NTRA	.	.							
	0039220			26C	\$, \$, 28,	36,	34,	33								
P	0039221				+ .GND26C16	.	.									
	0039221			26C	\$, 31,	30,	29									
P	0039222				+ .CM002	.	.									
	0039222			26C	\$, 37,	35										
P	0039223				+ .LSORR	.	.									
	0039223			26C	\$, 40											
P	0039300		LSOF	=	-FBF											
	0039300			26C	24											
P	0039400		LS1	=	-NFB											
	0039400			27C	22, 22-15D07T-31C46C-31D46C											
P	0039500		NLS1	=	-FB											
	0039500			27C	20											
P	0039510		S/LS1	=*	+ .PH1PD1	.T4D1-10	.ED	.NBUT	.	.						
	0039510			27C	\$, \$, 28,	36,	34,	33								
P	0039511				+ .PH2PD1	.T4D1-10	.ED									
	0039511			27C	\$, 31,	30,	29									
P	0039512				+ .PH6PD1	.T4D1-10	.									
	0039512			27C	\$, 37,	35										
P	0039513				+ .CM001	.	.									
	0039513			27C	\$, 40											
P	0039520		R/LS1	=*	+ .CM009	.T4D1-10	.	.	.	.		
	0039520			27C	\$, \$, 42,	44,	46,	50,	38							
P	0039521				+ .PH4PD1	.T4D1-10	.									
	0039521			27C	\$, 39,	41,	43									
P	0039522				+ .CM002	.	.									
	0039522			27C	\$, 45,	47										
P	0039600		LS1SR	=	-CR */LS1S/											
	0039600			01D	42, \$, 42-09D07C-09C07C											
P	0039605		/LS1S/	=	-NS											
	0039605															
P	0039700		LS2	=	-FB											
	0039700			30C	20, 20-11D07T-31C47C-31D47C											

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
				SIGMA 1-0-P-9471												
P	0039800		NLS2	=-NFB												
P	0039800			30C22												
P	0039810		S/LS2	=* +.PH182PD1	.T4D1-10	.T0RD										
P	0039810			30C\$, \$, 42,	44,	46,	50,	38								
P	0039811			+ .PH5PD1	.T4D1-10	.										
P	0039811			30C\$, 39,	41,	43										
P	0039812			+ .CM034	.											
P	0039812			30C\$, 45,	47											
P	0039820		R/LS2	=* +.PH4PD1	.T4D1-10	.										
P	0039820			30C\$, \$, 28,	36,	34,	33									
P	0039821			+ .PH13PD1	.T4D1-10	.										
P	0039821			30C\$, 31,	30,	29										
P	0039822			+ .GND30C16	.											
P	0039822			30C\$, 37,	35											
P	0039823			+ .CM002	.											
P	0039823			30C\$, 40												
P	0039900		LS2F	=-F3F												
P	0039900			30C24												
P	0039950		LSORR	=-CR */LSOR/												
P	0039950			01040, \$, 40-09D06C-09C06C												
P	0039955		/LSOR/	=-NS												
P	0039955															
P	0039969		/LX15/	=-CD *S15												
P	0039969			12A\$, 01												
P	0039971		/LX16/	=-CD *S16												
P	0039971			12A\$, 02												
P	0039973		/LX17/	=-CD *S17												
P	0039973			12A\$, 03												
P	0039975		/LX18/	=-CD *S18												
P	0039975			12A\$, 09												
P	0039977		/LX19/	=-CD *S19												
P	0039977			12A\$, 12												
P	0039979		/LX20/	=-CD *S20												
P	0039979			12A\$, 15												
P	0039981		/LX21/	=-CD *S21												
P	0039981			12A\$, 19												
P	0039983		/LX22/	=-CD *S22												
P	0039983			12A\$, 23												

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS													
	1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	74	75
																		123653-001	
																		03/10/75	
P	0039985		/LX23/	=-CD *S23															
P	0039985			12A\$,25															
P	0039987		/LX24/	=-CD *S24															
P	0039987			12A\$,33															
P	0039989		/LX25/	=-CD *S25															
P	0039989			12A\$,35															
P	0039991		/LX26/	=-CD *S26															
P	0039991			12A\$,37															
P	0039993		/LX27/	=-CD *S27															
P	0039993			12A\$,39															
P	0039995		/LX28/	=-CD *S28															
P	0039995			12A\$,45															
P	0039996		/LX29/	=-CD *S29															
P	0039996			14A\$,12															
P	0039997		/LX30/	=-CD *S30															
P	0039997			14A\$,15															
P	0039998		/LX31/	=-CD *S31															
P	0039998			14A\$,19															
P	0040000		M0	=B* +.NMUX0-0 .M0															
P	0040000			21A37X,\$,\$,27X,37X															
P	0040001			+ .I0 .MBOXI															
P	0040001			21A\$,45, 30X															
P	0040002			+ .ADD0 .MXADD-0															
P	0040002			21A\$,46, 31X															
P	0040003			+ .MXFR .FRO															
P	0040003			21A\$,29X, 47															
P	0040004			+ .MDO .MXM-0															
P	0040004			21A\$,50, 28X															
P	0040100		M1	=B* +.NMUX0-0 .M1															
P	0040100			21A33X,\$,\$,27X,33X															
P	0040101			+ .I1 .MBOXI															
P	0040101			21A\$,26, 30X															
P	0040102			+ .ADD1 .MXADD-C															
P	0040102			21A\$,25, 31X															
P	0040103			+ .FR1 .MXFR															
P	0040103			21A\$,24, 29X															
P	0040104			+ .MD1 .MXM-0															
P	0040104			21A\$,23, 28X															

CODE LINE NO. CHG LOGIC EQUATIONS / PINS / REMARKS

1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

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0040200      M10      =B* +.NMUX0-1 .M10
P 0040200      22A34X,$,$,27X,34X
0040201      +.I2      .MB1XI
P 0040201      22A$,41,      30X
0040202      +.ADD10     .MXADD-1
P 0040202      22A$,40,      31X
0040203      +.0F0      .MXIS
P 0040203      22A$,43,      29X
0040204      +.MD10     .MXM-1
P 0040204      22A$,44,      28X

0040300      M11      =B* +.NMUX0-1 .M11
P 0040300      22A35X,$,$,27X,35X
0040301      +.I3      .MB1XI
P 0040301      22A$,42,      30X
0040302      +.ADD11     .MXADD-1
P 0040302      22A$,39,      31X
0040303      +.0F1      .MXIS
P 0040303      22A$,36,      29X
0040304      +.MD11     .MXM-1
P 0040304      22A$,38,      28X

0040400      M12      =B* +.NMUX0-1 .M12
P 0040400      22A18X,$,$,17X,18X
0040401      +.I4      .MB1XI
P 0040401      22A$,19,      30X
0040402      +.ADD12     .MXADD-1
P 0040402      22A$,20,      31X
0040403      +.0F2      .MXIS
P 0040403      22A$,21,      29X
0040404      +.MD12     .MXM-1
P 0040404      22A$,22,      28X

0040500      M13      =B* +.NMUX0-1 .M13
P 0040500      22A13X,$,$,17X,13X
0040501      +.I5      .MB1XI
P 0040501      22A$,04,      30X
0040502      +.ADD13     .MXADD-1
P 0040502      22A$,03,      31X
0040503      +.GND22A16 .MXIS
P 0040503      22A$,02,      29X
0040504      +.MD13     .MXM-1
P 0040504      22A$,01,      28X
    
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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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P	0041000		M18	=B* +.NMLX0=0 .M18		
P	0041000			23A34X,\$,\$,27X,34X		
P	0041001			+.I2 .MB2XI		
P	0041001			23A\$,41, 30X		
P	0041002			+.GND23A32 .MXA		
P	0041002			23A\$,40, 31X		
P	0041003			+.BC2 .MXBC=0		
P	0041003			23A\$,43, 29X		
P	0041005			+.MD18 .MXM=2		
P	0041005			23A\$,44, 28X		

P	0041100		M19	=B* +.NMLX0=0 .M19		
P	0041100			23A35X,\$,\$,27X,35X		
P	0041101			+.I3 .MB2XI		
P	0041101			23A\$,42, 30X		
P	0041102			+.GND23A32 .MXA		
P	0041102			23A\$,39, 31X		
P	0041103			+.BC3 .MXBC=0		
P	0041103			23A\$,36, 29X		
P	0041104			+.MD19 .MXM=2		
P	0041104			23A\$,38, 28X		

P	0041200		M2	=B* +.NMUX0=0 .M2		
P	0041200			21A34X,\$,\$,27X,34X		
P	0041201			+.I2 .MBOXI		
P	0041201			21A\$,41, 30X		
P	0041202			+.ADD2 .MXADD=0		
P	0041202			21A\$,40, 31X		
P	0041203			+.FR2 .MXFR		
P	0041203			21A\$,43, 29X		
P	0041204			+.MD2 .MXM=0		
P	0041204			21A\$,44, 28X		

P	0041300		M20	=B* +.NMLX0=0 .M20		
P	0041300			23A18X,\$,\$,17X,18X		
P	0041301			+.I4 .MB2XI		
P	0041301			23A\$,19, 30X		
P	0041302			+.GND23A32 .MXA		
P	0041302			23A\$,20, 31X		
P	0041303			+.BC4 .MXBC=0		
P	0041303			23A\$,21, 29X		
P	0041304			+.MD20 .MXM=2		
P	0041304			23A\$,22, 28X		

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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	0041800		M25	=B* +.NMLX0-1 .M25		
P	0041800			24A33X, \$, \$, 27X, 33X		
	0041801			+ .I1 .MB3XI		
P	0041801			24A\$, 26, 30X		
	0041802			+ .A1 .MxA		
P	0041802			24A\$, 25, 31X		
	0041803			+ .BC9 .MXBC-1		
P	0041803			24A\$, 24, 29X		
	0041804			+ .MD25 .MxM-3		
P	0041804			24A\$, 23, 28X		
	0041900		M26	=B* +.NMLX0-1 .M26		
P	0041900			24A34X, \$, \$, 27X, 34X		
	0041901			+ .I2 .MB3XI		
P	0041901			24A\$, 41, 30X		
	0041902			+ .A2 .MxA		
P	0041902			24A\$, 40, 31X		
	0041903			+ .BC10 .MXBC-1		
P	0041903			24A\$, 43, 29X		
	0041904			+ .MD26 .MxM-3		
P	0041904			24A\$, 44, 28X		
	0042000		M27	=B* +.NMLX0-1 .M27		
P	0042000			24A35X, \$, \$, 27X, 35X		
	0042001			+ .I3 .MB3XI		
P	0042001			24A\$, 42, 30X		
	0042002			+ .A3 .MxA		
P	0042002			24A\$, 39, 31X		
	0042003			+ .BC11 .MXBC-1		
P	0042003			24A\$, 36, 29X		
	0042004			+ .MD27 .MxM-3		
P	0042004			24A\$, 38, 28X		
	0042100		M28	=B* +.NMLX0-1 .M28		
P	0042100			24A18X, \$, \$, 17X, 18X		
	0042101			+ .I4 .MB3XI		
P	0042101			24A\$, 19, 30X		
	0042102			+ .A4 .MxA		
P	0042102			24A\$, 20, 31X		
	0042103			+ .BC12 .MXBC-1		
P	0042103			24A\$, 21, 29X		
	0042104			+ .MD28 .MxM-3		
P	0042104			24A\$, 22, 28X		

CODE	LINE NO.	ENC	LOGIC	EQUATIONS	PINS	REMARKS
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P	0043000	M8	=B* +.NMUXO-1 .M8			
P	0043000		22A37X, \$, \$, 27X, 37X			
P	0043001		+ .I0 .MB1XI			
P	0043001		22A\$, 45, 30X			
P	0043002		+ .ADD8 .MXADD-1			
P	0043002		22A\$, 46, 31X			
P	0043003		+ .BC8 .MXIS			
P	0043003		22A\$, 47, 29X			
P	0043004		+ .MD8 .MXM-1			
P	0043004		22A\$, 50, 28X			
P	0043100	M9	=B* +.NMUXO-1 .M9			
P	0043100		22A33X, \$, \$, 27X, 33X			
P	0043101		+ .I1 .MB1XI			
P	0043101		22A\$, 26, 30X			
P	0043102		+ .ADD9 .MXADD-1			
P	0043102		22A\$, 25, 31X			
P	0043103		+ .BC9 .MXIS			
P	0043103		22A\$, 24, 29X			
P	0043104		+ .MD9 .MXM-1			
P	0043104		22A\$, 23, 28X			
P	0043150	M9-1	=B .M9 .			
P	0043150		28B46, 40, 41			
P	0043200	MAE	=-NFB			
P	0043200		01A22, 22-20A38T			
P	0043300	NMAE	=-FB			
P	0043300		01A20, 20-15C40T			
P	0043310	S/MAE	=* +.PH2PD1 .CM048 .NOUT			
P	0043310		01A\$, \$, 23, 36, 34, 33			
P	0043311		+ .PH4PD1 .CM048 .			
P	0043311		01A\$, 31, 30, 29			
P	0043312		+ .PH5PD1 .CM048			
P	0043312		01A\$, 37, 35			
P	0043313		+ .GND01A32			
P	0043313		01A\$, 40			
P	0043320	R/MAE	=* +.PH1D1 .TOD1-00 .			
P	0043320		01A\$, \$, 42, 44, 46, 50, 38			
P	0043321		+ .PH2TOD2 .			
P	0043321		01A\$, 39, 41, 43			
P	0043322		+ .PH12T0 .			
P	0043322		01A\$, 45, 47			
P	0043400	NMAEF	=I .PH1PD1 .CM048			
P	0043400		04A13, 04, 08			
P	0043401		-FBF			
P	0043401		01A24			

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	3	4	5	6
	8	9	10	11	12	13
	15	16	17	18	19	20
	25	26	27	28	29	30
	35	36	37	38	39	40
	45	46	47	48	49	50
	55	56	57	58	59	60
	65	66	67	68	69	70
	75	76	77	78	79	80
	85	86	87	88	89	90
	95	96	97	98	99	100
	105	106	107	108	109	110
	115	116	117	118	119	120
	125	126	127	128	129	130
	135	136	137	138	139	140
	145	146	147	148	149	150
	155	156	157	158	159	160
	165	166	167	168	169	170
	175	176	177	178	179	180
	185	186	187	188	189	190
	195	196	197	198	199	200
	205	206	207	208	209	210
	215	216	217	218	219	220
	225	226	227	228	229	230
	235	236	237	238	239	240
	245	246	247	248	249	250
	255	256	257	258	259	260
	265	266	267	268	269	270
	275	276	277	278	279	280
	285	286	287	288	289	290
	295	296	297	298	299	300
	305	306	307	308	309	310
	315	316	317	318	319	320
	325	326	327	328	329	330
	335	336	337	338	339	340
	345	346	347	348	349	350
	355	356	357	358	359	360
	365	366	367	368	369	370
	375	376	377	378	379	380
	385	386	387	388	389	390
	395	396	397	398	399	400
	405	406	407	408	409	410
	415	416	417	418	419	420
	425	426	427	428	429	430
	435	436	437	438	439	440
	445	446	447	448	449	450
	455	456	457	458	459	460
	465	466	467	468	469	470
	475	476	477	478	479	480
	485	486	487	488	489	490
	495	496	497	498	499	500
	505	506	507	508	509	510
	515	516	517	518	519	520
	525	526	527	528	529	530
	535	536	537	538	539	540
	545	546	547	548	549	550
	555	556	557	558	559	560
	565	566	567	568	569	570
	575	576	577	578	579	580
	585	586	587	588	589	590
	595	596	597	598	599	600
	605	606	607	608	609	610
	615	616	617	618	619	620
	625	626	627	628	629	630
	635	636	637	638	639	640
	645	646	647	648	649	650
	655	656	657	658	659	660
	665	666	667	668	669	670
	675	676	677	678	679	680
	685	686	687	688	689	690
	695	696	697	698	699	700
	705	706	707	708	709	710
	715	716	717	718	719	720
	725	726	727	728	729	730
	735	736	737	738	739	740
	745	746	747	748	749	750
	755	756	757	758	759	760
	765	766	767	768	769	770
	775	776	777	778	779	780
	785	786	787	788	789	790
	795	796	797	798	799	800
	805	806	807	808	809	810
	815	816	817	818	819	820
	825	826	827	828	829	830
	835	836	837	838	839	840
	845	846	847	848	849	850
	855	856	857	858	859	860
	865	866	867	868	869	870
	875	876	877	878	879	880
	885	886	887	888	889	890
	895	896	897	898	899	900
	905	906	907	908	909	910
	915	916	917	918	919	920
	925	926	927	928	929	930
	935	936	937	938	939	940
	945	946	947	948	949	950
	955	956	957	958	959	960
	965	966	967	968	969	970
	975	976	977	978	979	980
	985	986	987	988	989	990
	995	996	997	998	999	1000

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
			SIGMA 1.0 P 3471			
P	0044700		MD12	==CR */MX12/ 18A40,\$		
P	0044800		MD13	==CR */MX13/ 18A42,\$		
P	0044900		MD14	==CR */MX14/ 16A04,\$		
P	0045000		MD15	==CR */MX15/ 16A06,\$		
P	0045100		MD16	==CR */MX16/ 16A08,\$		
P	0045200		MD17	==CR */MX17/ 16A10,\$		
P	0045300		MD18	==CR */MX18/ 16A13,\$		
P	0045400		MD19	==CR */MX19/ 16A18,\$		
P	0045500		MD2	==CR */MX2/ 18A08,\$		
P	0045600		MD20	==CR */MX20/ 16A20,\$		
P	0045700		MD21	==CR */MX21/ 15A22,\$		
P	0045800		MD22	==CR */MX22/ 16A27,\$		
P	0045900		MD23	==CR */MX23/ 16A34,\$		
P	0046000		MD24	==CR */MX24/ 16A36,\$		
P	0046100		MD25	==CR */MX25/ 16A38,\$		
P	0046200		MD26	==CR */MX26/ 16A40,\$		
P	0046300		MD27	==CR */MX27/ 16A42,\$		

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CODE	LINE NO.	ENG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	8	9	10	15 20 25 30 35 40 45 50 55 60 65 70
						123653-001 03/16
P	0048800		MPEF	=-FBF		
P	0048800			02A21		
P	0048900		MQ	=B .MS	.NMR	
P	0048900			15A33,26,	25,	27
P	0048920		/MQX/	=-CD *M3		
P	0048920			10A\$,01		
P	0049000		MS	=-NFB		
P	0049000			02A22,22-20A43T		
P	0049050		MS=1	=I .NMSF	.	
P	0049050			04A01,10,	11,01-04B26T	
P	0049100		NMS	=-FB		
P	0049100			02A20,20-04B27T		
P	0049110		S/MS	=* +.CM014	.CM040	.NERD
P	0049110			02A\$,5,28,	36,	.NH3
P	0049111			+ .PH12T1	.NFB	33
P	0049111			02A\$,31,	30,	.CM041
P	0049112			+ .CM039	.NPR2	29
P	0049112			02A\$,37,	35	
P	0049113			+ .MSSET		
P	0049113			02A\$,40		
P	0049120		R/MS	=* +.MCD1	.TOD1=00	.
P	0049120			02A\$,42,	44,	.NH3
P	0049121			+ .	.PH2TOD2	50,
P	0049121			02A\$,39,	41,	.CM044
P	0049122			+ .RESET	.	38
P	0049122			02A\$,45,	47	
P	0049200		NMSF	=I .PH13D1	.T2D1=00	.CM041
P	0049200			04A34,24,	23,	.BUT
P	0049201			I .PH13T0	.NPR2	28
P	0049201			04A12,06,	05,	.BRD
P	0049202			I .CM042	.PH1T2D1	07
P	0049202			04A46,40,	41	
P	0049203			-FBF		
P	0049203			02A24		
P	0049300		MSSET	=B* +.NEH	.NBC15	.PH4T1D1
P	0049300			03B23,\$,\$,27,	26,	25X,23-04B26T
P	0049301			+ .NEH	.CMD	.PH4T1D1
P	0049301			03B\$,24,	28,	25X
P	0049302			+ .NEH	.NTRA	.T1D1=20
P	0049302			03B\$,34,	38,	.PH5D1-1
P	0049303			+ .CM043	.NMPE	33X
P	0049303			03B\$,36,	39,	.NPR2
						.NH3
						40X

SDS

SCIENTIFIC DATA SYSTEMS
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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	88	89	90	91	92	93	94	95	96	97	98	99	100
			SIGMA 1-8 * P = 3471																
P	0049400		NMUX01	=I	,T1D1-00	,PH10D1-1													
P	0049400				11A45,39,	42,45=07A36T													
P	0049500		NMUX0-0	=B	.NCM011	.NMLX01	.NPH12TO												
P	0049500				13A33,26,	25,	27												
P	0049501				B	.NCM012	.NMUX01												
P	0049501				13A35,38,	43													
P	0049600		NMUX0-1	=B	.NCM011	.NMLX01	.NPH12TO												
P	0049600				13A12,06,	05,	07												
P	0049601				B	.NCM012	.NMUX01												
P	0049601				13A36,44,	37													
P	0049603		/MX0/	=-CD	*M0														
P	0049603				18A\$,01														
P	0049605		/MX1/	=-CD	*M1														
P	0049605				18A\$,02														
P	0049607		/MX2/	=-CD	*M2														
P	0049607				18A\$,03														
P	0049609		/MX3/	=-CD	*M3														
P	0049609				18A\$,09.														
P	0049611		/MX4/	=-CD	*M4														
P	0049611				18A\$,12														
P	0049613		/MX5/	=-CD	*M5														
P	0049613				18A\$,15														
P	0049615		/MX6/	=-CD	*M6														
P	0049615				18A\$,19														
P	0049617		/MX7/	=-CD	*M7														
P	0049617				18A\$,23														
P	0049619		/MX8/	=-CD	*M8														
P	0049619				18A\$,25														
P	0049621		/MX9/	=-CD	*M9														
P	0049621				18A\$,33														
P	0049623		/MX10/	=-CD	*M10														
P	0049623				18A\$,35														
P	0049625		/MX11/	=-CD	*M11														
P	0049625				18A\$,37														
P	0049627		/MX12/	=-CD	*M12														
P	0049627				18A\$,39														

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
P	0049629		/MX13/	==CD *M13		
P	0049629			18A\$,45		
P	0049631		/MX14/	==CD *M14		
P	0049631			16A\$,01		
P	0049633		/MX15/	==CD *M15		
P	0049633			16A\$,02		
P	0049635		/MX16/	==CD *M16		
P	0049635			16A\$,03		
P	0049637		/MX17/	==CD *M17		
P	0049637			16A\$,09		
P	0049639		/MX18/	==CD *M18		
P	0049639			16A\$,12		
P	0049641		/MX19/	==CD *M19		
P	0049641			16A\$,15		
P	0049643		/MX20/	==CD *M20		
P	0049643			16A\$,19		
P	0049645		/MX21/	==CD *M21		
P	0049645			16A\$,23		
P	0049647		/MX22/	==CD *M22		
P	0049647			16A\$,25		
P	0049649		/MX23/	==CD *M23		
P	0049649			16A\$,33		
P	0049651		/MX24/	==CD *M24		
P	0049651			16A\$,35		
P	0049653		/MX25/	==CD *M25		
P	0049653			16A\$,37		
P	0049655		/MX26/	==CD *M26		
P	0049655			16A\$,39		
P	0049657		/MX27/	==CD *M27		
P	0049657			16A\$,45		
P	0049659		/MX28/	==CD *M28		
P	0049659			14A\$,01		
P	0049661		/MX29/	==CD *M29		
P	0049661			14A\$,02		

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CODE	LINE NO.	CHK	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0049663		/MX30/	=-CD *M30												
	0049663			14A8,03												
P	0049665		/MX31/	=-CD *M31												
	0049665			14A8,09												
P	0049674		/MWOX/	=-CD *W0												
	0049674			14A8,23												
P	0049676		/MW1X/	=-CD *W1												
	0049676			14A8,25												
P	0049678		/MW2X/	=-CD *W2												
	0049678			14A8,33												
P	0049680		/MW3X/	=-CD *W3												
	0049680			14A8,35												
P	0049700		MXA	=B .PH12T3	.8RD											
	0049700			13A15,30,	18,	31,										17
P	0049800		NMXADD	=I .PH12D1	.T1D1-00	.NFO										.NF3
	0049800			11A34,24,	23,	22,										28,34-25B02T
P	0049801			I .PH13D1	.T2D1-00	.8UT										
	0049801			11A12,06,	05,	07										
P	0049802			I .PH10PD1	.T4D1-20											
	0049802			11A02,03,	09											
P	0049900		MXADD-0	=I .NMXADD												
	0049900			27A25,23,	29X,25-20A44T											
P	0050000		MXADD-1	=I .NMXADD												
	0050000			27A27,22,	29X,27-20A45T											
P	0050200		MX3C-0	=B .PH12T1	.NFO											
	0050200			15A13,04,	08,13-07A17T											
P	0050300		MX3C-1	=B .PH12T1	.NFO											
	0050300			15A02,03,	09,02-07A34T											
P	0050400		MXFR	=B .PH12T1	.NFO											
	0050400			15A46,40,	41,46-20A22T											
P	0050500		MXIS	=I .NMXIS												
	0050500			17A15,13,15-20A46T												
P	0050600		NMXIS	=I .PH13D1	.T0D1-00	.CM015										
	0050600			17A06,14,	08,	07,06-20A47T										
P	0050700		NMXM	=I .DG	.MS											
	0050700			04A35,33,	43,35-20A50T											

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	92	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	92	C/L

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P	0051600	02	=B* +.NBX0	.02														
P	0051600		31A12X, \$, \$, 23X, 12X															
	0051601		+ .I2	.03X														
P	0051601		31A\$, 11,	18X														
	0051602		+ .BC2	.0XT0RD														
P	0051602		31A\$, 10,	22X														
P	0051700	03	=B* +.NBX0	.03														
P	0051700		31A14X, \$, \$, 23X, 14X															
	0051701		+ .I3	.03X														
P	0051701		31A\$, 15,	18X														
	0051702		+ .EH	.0XT0RD														
P	0051702		31A\$, 17,	22X														
P	0051800	04	=B* +.NBX0	.04														
P	0051800		31A21X, \$, \$, 30X, 21X															
	0051801		+ .I4	.08X														
P	0051801		31A\$, 20,	13X														
	0051802		+ .0410S	.0XT0RD														
P	0051802		31A\$, 19,	05X														
P	0051900	04T05	=B* +.0RD0BT	.EH														
P	0051900		08A36, \$, \$, 26, 25, 36-32950T															
	0051901		+ .0BT	.EH														
P	0051901		08A\$, 29,	28,														
P	0052000	05	=B* +.NBX0	.05														
P	0052000		31A46X, \$, \$, 30X, 46X															
	0052001		+ .I5	.08X														
P	0052001		31A\$, 47,	13X														
	0052002		+ .GND31A16	.0XT0RD														
P	0052002		31A\$, 50,	05X														
P	0052100	06	=B* +.NBX0	.06														
P	0052100		31A09X, \$, \$, 30X, 09X															
	0052101		+ .I6	.08X														
P	0052101		31A\$, 08,	13X														
	0052102		+ .GND31A16	.0XT0RD														
P	0052102		31A\$, 06,	05X														
P	0052200	07	=B* +.NBX0	.07														
P	0052200		31A07X, \$, \$, 30X, 07X															
	0052201		+ .I7	.08X														
P	0052201		31A\$, 04,	13X														
	0052202		+ .GND31A16	.0XT0RD														
P	0052202		31A\$, 03,	05X														

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1		STGMA 1404P 5471			
P	0052300		0F0	=-HSM		
P	0052300			11043, 43-25B07T-31D25C-31C25C		
P	0052301			-HSM		
P	0052301			12D43		
P	0052302			-HSM		
P	0052302			13D43		
P	0052303			-HSM		
P	0052303			14D43		
P	0052310		K/0F007-0/	=-0FXH	.	
P	0052310			11013,	31	
P	0052311		K/0F007-1/	=-0FXH	.	
P	0052311			12013,	31	
P	0052312		K/0F007-2/	=-0FXH	.	
P	0052312			13013,	31	
P	0052313		K/0F007-3/	=-0FXH	.	
P	0052313			14013,	31	
P	0052314		L/0F007-0/1	=-NSPA5-1	.NSPA4-1	.NSPA3-1
P	0052314			11023,	20X,	21X, 27X, 26X, 22X
P	0052315		L/0F007-0/2	=-SPA5-1	.NSPA4-1	.NSPA3-1
P	0052315			11025,	20X,	21X, 27X, 26X, 22X
P	0052316		L/0F007-0/3	=-LS2		
P	0052316			11018		
P	0052317		L/0F007-0/4	=-SPA7-1		
P	0052317			11029		
P	0052318		L/0F007-0/5	=-SPA6-1		
P	0052318			11030		
P	0052319		L/0F007-1/1	=-NSPA5-1	.NSPA4-1	.SPA3-1
P	0052319			12023,	20X,	21X, 27X, 26X, 22X
P	0052320		L/0F007-1/2	=-SPA5-1	.NSPA4-1	.SPA3-1
P	0052320			12025,	20X,	21X, 27X, 26X, 22X
P	0052321		L/0F007-1/3	=-LS2		
P	0052321			12018		
P	0052322		L/0F007-1/4	=-SPA7-1		
P	0052322			12029		
P	0052323		L/0F007-1/5	=-SPA6-1		
P	0052323			12030		

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS																	
	1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
P	0052324		L/8F007-2/1	=•NSPA5-1	•SPA4-1	•NSPA3-1	.	.	.														
	0052324			13023,	20X,	21X,	27X,	26X,	22X														
P	0052325		L/8F007-2/2	=•SPA5-1	•SPA4-1	•NSPA3-1	.	.	.														
	0052325			13025,	20X,	21X,	27X,	26X,	22X														
P	0052326		L/8F007-2/3	=•LS2																			
	0052326			13018																			
P	0052327		L/8F007-2/4	=•SPA7-1																			
	0052327			13029																			
P	0052328		L/8F007-2/5	=•SPA6-1																			
	0052328			13030																			
P	0052329		L/8F007-3/1	=•NSPA5-1	•SPA4-1	•SPA3-1	.	.	.														
	0052329			14023,	20X,	21X,	27X,	26X,	22X														
P	0052330		L/8F007-3/2	=•SPA5-1	•SPA4-1	•SPA3-1	.	.	.														
	0052330			14025,	20X,	21X,	27X,	26X,	22X														
P	0052331		L/8F007-3/3	=•LS2																			
	0052331			14018																			
P	0052332		L/8F007-3/4	=•SPA7-1																			
	0052332			14029																			
P	0052333		L/8F007-3/5	=•SPA6-1																			
	0052333			14030																			
P	0052334		W/8F007-0/1	=•H0																			
	0052334			11035																			
P	0052335		W/8F007-0/2	=•H1																			
	0052335			11034																			
P	0052336		W/8F007-0/3	=•H2																			
	0052336			11019																			
P	0052337		W/8F007-0/4	=•H3																			
	0052337			11012																			
P	0052338		W/8F007-0/5	=•H4																			
	0052338			11033																			
P	0052339		W/8F007-0/6	=•H5																			
	0052339			11028																			
P	0052340		W/8F007-0/7	=•H6																			
	0052340			11017																			

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C/1

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0053500		NBRD	=-NFB												
P	0053500			29C26,26=04B29T												
P	0053510		S/BRD	=* +.PH1D1	.T1D1-30	.DOR										
P	0053510			29C\$, \$, 19,	17,	18,										14
P	0053511			+ .CM010												
P	0053511			29C\$, 01												
P	0053520		R/BRD	=* +.PH2T1D2												
P	0053520			29C\$, \$, 04												
P	0053521			+ .GND29C16												
P	0053521			29C\$, 06,	12,	08										
P	0053550		NBRD-1	=I .BRD												
P	0053550			20B28,21,	29X,28=04B30T											
P	0053600		BRDIN	=B .BRD	.NOUT											
P	0053600			10B01,10,	11											
P	0053700		BRDOUT	=B .BRD	.OUT											
P	0053700			10B36,44,	37											
P	0053800		OUT	=-Fg												
P	0053800			30C27,27=04B31T												
P	0053900		NOUT	=-NFB												
P	0053900			30C26,26=25B14T												
P	0053910		S/OUT	=* +.PH1D1	.T1D1-30	.IOR										
P	0053910			30C\$, \$, 19,	17,	18,										14
P	0053911			+ .CM035												
P	0053911			30C\$, 01												
P	0053920		R/OUT	=* +.PH2T1D2												
P	0053920			30C\$, \$, 04,												
P	0053921			+ .GND30C16												
P	0053921			30C\$, 06,	12,	08										
P	0054000		N9X0	=I* +.PH1D1-1	.T0D1-30											
P	0054000			30A13, \$, \$, 21,	22, 13-25B15T											
P	0054001			+ .PH5D1-1	.T0D1-30	.BRD										
P	0054001			30A\$, 18,	19,	20										
P	0054002			+ .PH7D1	.T0D1-30	.TGRD										
P	0054002			30A\$, 17,	15,	14										
P	0054003			I* +.PH2T0D1												
P	0054003			30A01, \$, \$, 08,	07											
P	0054004			+ .RESET												
P	0054004			30A\$, 05,	06											
P	0054005			I .PH2T2D2	.NCM044											
P	0054005			27A06, 14,	08,	07										

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
				SIGMA 1+0+P 5471												
P	0054100		OXI	=-NFB												
P	0054100			05A23,23	25B17T											
P	0054200		NSXI	=-FB												
P	0054200			05A25												
P	0054210		S/OXI	=* +.PH2T0D1 .9UT												
P	0054210			05A\$,5,15,	13											
P	0054211			+ .PH10D1-1 .T0D1=00												
P	0054211			05A\$,11,	09											
P	0054220		R/OXI	=* +.T2D1=00 .												
P	0054220			05A\$,5,10,	02,	03										
P	0054221			+ .RESET .												
P	0054221			05A\$,05,	07											
P	0054300		N0XIF	=I .PH5D1 .T0D1=00 .9RD												
P	0054300			04A33,25,	25,	27										
P	0054301			-F8F												
P	0054301			05A21												
P	0054400		0XT0RD	=B .PH7T1D1 .T8RD												
P	0054400			30A37,46,	41,	50,37=15C44T										
P	0054500		PC	=-CR */PC/												
P	0054500			32A36,\$												
P	0054501		/PC/	=-CD #GND32A16												
P	0054501			32A\$,35												
P	0054600		PE	=-CR */PEX/												
P	0054600			10A13,\$												
P	0054700		PER	=-CR */PERX/												
P	0054700			10A20,\$												
P	0054730		/PERX/	=-CD #GND10A32												
P	0054730			10A\$,19												
P	0054750		/PEX/	=-CD #GND10A32												
P	0054750			10A\$,12												
P	0055000		PH10D1	=B* +.NPHD1X0 .PH10D1												
P	0055000			07B01X,\$,\$,43X,01X												
P	0055001			+ .PH10D1S0 .												
P	0055001			07B\$,45,	37X											
P	0055002			+ .GND07B16 .T4D1=30												
P	0055002			07B\$,44,	38X											
P	0055050		PH10D1=1	=B .PH10D1 .												
P	0055050			15B13,04,	08,											

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0371

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
			SIGMA 1-0477-5471			
P	0055100		PH10D1S0	=B .PH2PD2 .T3D2	.CM044	.
P	0055100			05B14,21, 20,	29,	19
P	0055200		PH10PD1	=B* +.PH10PD1 .NPHPD1X0		
P	0055200			08B07X,\$,\$,07X,30X,07X-25318T		
P	0055201			+.PH10D1 .T1D1-10		
P	0055201			08B\$,04, 13X		
P	0055202			+.GND08B16 .		
P	0055202			08B\$,05X, 03		
P	0055300		PH10T0	=I .NPH10T0		
P	0055300			17A10,09,10-04834T		
P	0055400		NPH10T0	=I .PH10D1-1 .T0D1-20		
P	0055400			17B36,37, 33X,36-07A41T		
P	0055600		PH11D1	=B* +.PH11D1 .NPHD1X0		
P	0055600			07B09X,\$,\$,09X,30X,09X-04835T		
P	0055601			+.PH11D1S0.T4D1-0		
P	0055601			07B\$,08, 13X		
P	0055602			+.GND07B16 .T4D1-20		
P	0055602			07B\$,06, 05X		
P	0055700		PH11D1S0	=B .PH10PD1 .CMD		
P	0055700			05B35,38, 43		
P	0055800		PH11PD1	=B* +.PH11PD1 .NPHPD1X0		
P	0055800			08B02X,\$,\$,02X,43X		
P	0055801			+.PH11D1 .T1D1-10		
P	0055801			08B\$,31, 37X		
P	0055802			+.GND08B16 .		
P	0055802			08B\$,38X, 33		
P	0055900		PH12D1	=B* +.PH12D1 .NPHD1X0		
P	0055900			07B39X,\$,\$,39X,36X		
P	0055901			+.PH12D1S0.		
P	0055901			07B\$,35, 37X		
P	0055902			+.CM009 .T4D1-30		
P	0055902			07B\$,34, 38X		
P	0056000		PH12D1S0	=B .F0		
P	0056000			05B01,10, 11		
P	0056001			3 .PH2PD2 .T3D2		
P	0056001			05B36,44, 37		
P	0056100		PH12PD1	=B* +.PH12PD1 .NPHPD1X0		
P	0056100			08B01X,\$,\$,01X,43X		
P	0056101			+.PH12D1 .T1D1-10		
P	0056101			08B\$,45, 37X		
P	0056102			+.GND08B16 .		
P	0056102			08B\$,38X, 44		

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03/10

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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057146

1 2 3 4 5 6 7 8 9 10 11 12 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 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

P	0056200		NPH12PD1	=I .PH12PD1	50X,46-25B19T	
	0056200			17B46,30,		
P	0056300		PH12T0	=I .NPH12T0	50X,44-04836T	
	0056300			17B44,42,		
P	0056400		NPH12T0	=I .PH12D1	.T0D1-20	
	0056400			17B34,40,	33X,34-07A42T	
P	0056500		PH12T1	=B .PH12D1	.T1D1-10	
	0056500			10B13,04,	08,13-08C37T	
P	0056600		PH12T3	=B .PH12PD1	.T3D1-10	
	0056600			10B46,40,	41,46-09C46C-09D46C-10D46T	
P	0056700		NPH12T4	=I .PH12PD1	.T4D1-20	
	0056700			16C45,39,	42,45-15C45T	
P	0056800		PH13D1	=B* +.PH13D1	.NPHD1X0	
	0056800			07B07X,\$,\$,07X,30X		
P	0056801			+ .PH12PD1	.T4D1-0	
	0056801			07B\$,04,	13X	
P	0056802			+ .GND07B16	.T4D1-20	
	0056802			07B\$,03,	05X	
P	0056900		PH13PD1	=B* +.PH13PD1	.NPHPD1X0	
	0056900			08B39X,\$,\$,39X,36X		
P	0056901			+ .PH13D1	.T1D1-10	
	0056901			08B\$,35,	37X	
P	0056902			+ .GND08B16	.	
	0056902			08B\$,38X,	34	
P	0057000		PH13T0	=B .PH13D1	.T0D1-20	
	0057000			02B02,03,	09,02-25B20T	
P	0057100		PH14D1	=B* +.PH14D1	.NPHD1X0	
	0057100			07B42X,\$,\$,42X,36X		
P	0057101			+ .GND07B16.		
	0057101			07B\$,41,	37X	
P	0057102			+ .PH13PD1	.T4D1-30	
	0057102			07B\$,40,	38X	
P	0057200		PH14PD1	=B* +.PH14PD1	.NPHPD1X0	
	0057200			08B42X,\$,\$,42X,36X		
P	0057201			+ .PH14D1	.T1D1-10	
	0057201			08B\$,41,	37X	
P	0057202			+ .GND08B16	.	
	0057202			08B\$,38X,	40	

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1					123653-001
	2					037176
	8					
	9					
	10					
	15					
	20					
	25					
	30					
	35					
	40					
	45					
	50					
	55					
	60					
	65					
	70					
P	0057300		PH1D1	=B* +.NPHD1X0 .PH1D1		
P	0057300			07B02X, \$, \$, 43X, 02X		
P	0057301			+ .PH1D1S0 .		
P	0057301			07B\$, 31, 37X		
P	0057302			+ .GND07B16 .T4D1-30		
P	0057302			07B\$, 33, 38X		
P	0057400		PH1D1S0	=B .PH2PD2 .T4D2 .F1		
P	0057400			05B33, 26, 25, 27		
P	0057500		PH1D2	=B* +.T4D1-30 .PH12PD1 .NF1		
P	0057500			04C22, \$, \$, 09, 10, 21X, 08, 22-15C46T		
P	0057501			+ .NF1 .NFNT .T4D2 .PH2PD2		
P	0057501			04C\$, 21X, 20, 19, 18		
P	0057502			+ .PH1T2D1 .		
P	0057502			04C\$, 05, 13, 04X		
P	0057503			+ .PH1D2 .NT3D2		
P	0057503			04C\$, 06, 07		
P	0057504			+ .RESET .		
P	0057504			04C\$, 12, 11		
P	0057600		PH102D1	=B* +.PH1D1 .		
P	0057600			04C14, \$, \$, 15, 17, 14-04B37T		
P	0057601			+ .PH2D1 .		
P	0057601			04C\$, 03, 01, 02, 04X		
P	0057700		PH102PD1	=I .NPH1PD1 .NPH2PD1		
P	0057700			17C45, 39, 42, 45-04B38T		
P	0057800		PH104D1	=B* +.PH1D1 .		
P	0057800			03B14, \$, \$, 17, 15, 14-25B21T		
P	0057801			+ .PH4D1 .		
P	0057801			03B\$, 01, 02, 03, 04X		
P	0057900		PH1PD1	=B* +.PH1PD1 .NPHPD1X0		
P	0057900			08B26X, \$, \$, 26X, 23X		
P	0057901			+ .PH1D1 .T1D1-10		
P	0057901			08B\$, 25, 18X		
P	0057902			+ .GND08B16 .		
P	0057902			08B\$, 22X, 24		
P	0058000		NPH1PD1	=I .PH1PD1 .		
P	0058000			17C02, 03, 09, 02-15C47T		
P	0058100		PH1PD2	=B* +.PH1PD2 .NT0D2		
P	0058100			03C24, \$, \$, 35, 30, 24-25B22T		
P	0058101			+ .PH1D2 .T1D2 .		
P	0058101			03C\$, 31, 33, 34		
P	0058200		NPH1PD2	=I .PH1PD2 .		
P	0058200			17B47, 31, 50X, 47-25B23T		

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
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03710

P	0058300		PH1T2D1	=B .PH1D1 .T2D1-10 02B36,44,	37,36-09C47C-09D47C-10D47I	
P	0058400		PH1T2D2	=B .PH1D2 .T2D2-0 21C45,39,	42,45-09C40C-09D40C-10D40T	
P	0058500		PH2D1	=B* +.PH2D1 .NPHD1X0 07B26X,\$,\$,26X,23X +.PH2D1S0 .T4D1-0 07B\$,23, 18X +.PH2D1S1 .T4D1-0 07B\$,24, 22X		
P	0058600		PH2D1S0	=B .N9RD-1 .NED .PH192PD1 05B12,06, 05, 07		
P	0058700		PH2D1S1	=B .PH1PD1 .N9RD-1 .9UT 05B34,24, 23, 22, 28		
P	0058800		PH2D2	=-FB 05C25,25-25B24T		
P	0058900		NPH2D2	=-NFB 05C23		
P	0058910		S/PH2D2	=* +.GND05C16 . 05C\$, \$,10, 02, 03 +.PH1PD2 .T4D2 05C\$,05, 07		
P	0058920		R/PH2D2	=* +.T3D2 . 05C\$, \$,15, 13 +.RESET . 05C\$,11, 09		
P	0059000		PH2D2F	=-F2F 05C21		
P	0059100		PH2PD1	=B* +.PH2PD1 .NPHPD1X0 08B27X,\$,\$,27X,23X +.PH2D1 .T1D1-10 08B\$,28, 18X +.GND08B16 . 08B\$,22X, 29		
P	0059200		NPH2PD1	=I .PH2PD1 . 17C46,40, 41,46-15C50T		

SDS

SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS											
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75
				SIGMA 1704P 3471													
P	0059300		PH2PD2	=B* +.PH2PD2	.NTOD2												
P	0059300			03C36,\$,\$,26,	25,36-04839T												
P	0059301			+ .PH2D2F	.T1D2												
P	0059301			03C\$,29,	28,	27											
P	0059400		PH2TOD1	=B .PH2D1	.TOD1-20												
P	0059400			10B02,03,	09,02-08C38T												
P	0059500		PH2TOD2	=B .PH2D2	.TOD2												
P	0059500			18B36,44,	37												
P	0059600		PH2T1D2	=B .PH2D2	.T1D2												
P	0059600			02B46,40,	41,46-09C50C-09D50C-10D50I												
P	0059700		NPH2T1D2	=I .PH2D2F	.T1D2												
P	0059700			01C46,40,	41,46-04840T												
P	0059900		NPH2T2D1	=I .PH2D1	.T2D1-20												
P	0059900			17C13,04,	08,13-16C47T												
P	0060000		PH2T2D2	=I .NPH2T2D2	.												
P	0060000			16C02,03,	09,02-25825T												
P	0060100		NPH2T2D2	=I .PH2D2	.T2D2=0												
P	0060100			19B46,40,	41,46-19C50T												
P	0060200		PH3D1	=B* +.PH3D1	.NPHD1X0												
P	0060200			07B27X,\$,\$,27X,23X													
P	0060201			+ .PH3D1S0	.T4D1=0												
P	0060201			07B\$,28,	18X												
P	0060202			+ .GND07B16	.T4D1=0												
P	0060202			07B\$,29,	22X												
P	0060300		PH3D1S0	=B .CSA	.												
P	0060300			05B13,04,	08												
P	0060301			B .PH102PD1	.NERD-1	.NFP	.NZBC										
P	0060301			05B15,30,	18,	31,	17										
P	0060400		PH3PD1	=B* +.PH3PD1	.NPHPD1X0												
P	0060400			08B12X,\$,\$,12X,23X													
P	0060401			+ .PH3D1	.T1D1-10												
P	0060401			08B\$,11,	18X												
P	0060402			+ .GND08B16	.												
P	0060402			08B\$,22X,	10												
P	0060600		PH4D1	=B* +.PH4D1	.NPHD1X0												
P	0060600			07B12X,\$,\$,12X,23X													
P	0060611			+ .PH4D1S0	.T4D1=0												
P	0060611			07B\$,11,	18X												
P	0060612			+ .GND07B16	.T4D1=0												
P	0060612			07B\$,10,	22X												

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
																123653-001
																03/12/76
P	0060700		PH4D1S0	=3* +.PH1PD1 .SRD9UT	.	.										
P	0060700			06B22,\$,\$,08,09,	10,	21X,22=04B41T										
P	0060701			+.PH4PD1 .NEH	.NMS	.										
P	0060701			06B\$,20,	19,	18,	21X									
P	0060702			+.Z3C	.H6	.PH102PD1										
P	0060702			06B\$,05,	13,	04X										
P	0060703			+.PH5PD1 .NCM007												
P	0060703			06B\$,11,	12											
P	0060704			+.GND06B16	.											
P	0060704			06B\$,07,	06											
P	0060800		PH4PD1	=8* +.PH4PD1 .NPHPD1X0												
P	0060800			08B14X,\$,\$,14X,23X												
P	0060801			+.PH4D1 .T1D1-10												
P	0060801			08B\$,15,	18X											
P	0060802			+.GND08B16	.											
P	0060802			08B\$,22X,	17											
P	0060900		PH4T0D1	=8 .PH4D1 .T0D1-20												
P	0060900			02B35,38,	43,35=13C36T											
P	0061000		PH4T1D1	=8 .PH4D1 .T1D1-20												
P	0061000			02B45,39,	42											
P	0061100		PH5D1	=8* +.PH5D1 .NPHD1X0												
P	0061100			07B14X,\$,\$,14X,23X												
P	0061101			+.PH5D1S0 .T4D1-0												
P	0061101			07B\$,15,	18X											
P	0061102			+.PH5D1S1 .T4D1-0												
P	0061102			07B\$,17,	22X											
P	0061150		PH5D1-1	=8 .PH5D1	.											
P	0061150			15B02,03,	09,											
P	0061200		PH5D1S0	=8 .PH4PD1 .EH												
P	0061200			05B02,03,	09											
P	0061300		PH5D1S1	=8 .PH4PD1 .MS-1												
P	0061300			05B46,40,	41											
P	0061400		PH5PD1	=8* +.PH5PD1 .NPHPD1X0												
P	0061400			03B21X,\$,\$,21X,30X												
P	0061401			+.PH5D1 .T1D1-10												
P	0061401			08B\$,20,	13X											
P	0061402			+.GND08B15	.											
P	0061402			08B\$,05X,	19											

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70

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P	0061500		PH6D1	=B* +.PH6D1 .NPHD1X0		
P	0061500			07B21X, \$, \$, 21X, 30X		
P	0061501			+.PH6D1S0 .T4D1-0		
P	0061501			07B\$, 20, 13X		
P	0061502			+.GND07B16 .T4D1-20		
P	0061502			07B\$, 19, 05X		
P	0061600		PH6D1S0	=B .PH5PD1 .CM007		
P	0061600			05B45, 39, 42		
P	0061700		PH6PD1	=B* +.PH6PD1 .NPHPD1X0		
P	0061700			08B46X, \$, \$, 46X, 30X		
P	0061701			+.PH6D1 .T1D1-10		
P	0061701			08B\$, 47, 13X		
P	0061702			+.GND08B16 .		
P	0061702			08B\$, 05X, 50		
P	0061800		PH6T0D1	=B .PH6D1 .T0D1-30		
P	0061800			21C02, 03, 09, 02-09C43C-09D43C-10027T		
P	0061900		PH7D1	=B* +.PH7D1 .NPHD1X0		
P	0061900			07B46X, \$, \$, 46X, 30X		
P	0061901			+.PH7D1S0 .T4D1-0		
P	0061901			07B\$, 47, 13X		
P	0061902			+.PH6PD1 .T4D1-20		
P	0061902			07B\$, 50, 05X		
P	0062000		PH7D1S0	=B* +.PH3PD1 .NFP		
P	0062000			06B14, \$, \$, 17, 15, 14-09A50T		
P	0062001			+.CM008 .PH102PD1 .		
P	0062001			06B\$, 02, 04x, 03, 01		
P	0062100		PH7PD1	=B* +.PH7PD1 .NPHPD1X0		
P	0062100			08B09X, \$, \$, 09X, 30X		
P	0062101			+.PH7D1 .T1D1-10		
P	0062101			08B\$, 08, 13X		
P	0062102			+.GND08B16 .		
P	0062102			08B\$, 05X, 06		
P	0062200		PH7T1D1	=B .PH7D1 .T1D1-20		
P	0062200			02B01, 10, 11, 01-25B26T		
P	0062300		NPH7T1D1	=I .PH7D1 .T1D1-30		
P	0062300			19B45, 39, 42, 45-16C50T		
P	0062400		NPHD1X0	=B .NT3D1 .NRESET		
P	0062400			10B12, 06, 05, 07		

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CODE	LINE NO.	LOGIC	EQUATIONS	PINS	REMARKS
1	2	3	4	5	6
P	0063300	PR	= I .NPR		
P	0063300		20B15,13		
P	0063310	/PR/	= -CD *PR		
P	0063310		12C8,45		
P	0063350	NPR	= I .CNSTNME .LASTONE		
P	0063350		18C45,39, 42,45*08C11		
P	0063351		I .PR1 .NPR2		
P	0063351		18C35,38, 43		
P	0063400	PR1	= -FB		
P	0063400		06C20,20=18C50T		
P	0063500	NPR1	= *NFB		
P	0063500		06C22		
P	0063510	S/PRI	= * +.PH12T3 .NBRD=1 .NTPE		
P	0063510		06C8,8,42, 44, 46, 50, 38		
P	0063511		+ .PH12T3 .NBRD=1 .MPE		
P	0063511		06C8,39, 41, 43		
P	0063512		+ .NFNT .MAR		
P	0063512		06C8,45, 47		
P	0063520	R/PRI	= * +.GND06C16 .		
P	0063520		06C8,8,28, 36, 34, 33		
P	0063521		+ .PH1T2D2 .FNT		
P	0063521		06C8,31, 30, 29		
P	0063522		+ .GND06C16 .		
P	0063522		06C8,37, 35		
P	0063523		+ .GND06C16 .		
P	0063523		06C8,40		
P	0063600	PR1F	= -FBF		
P	0063600		06C24		
P	0063700	PR2	= -NFB		
P	0063700		06C23,23*08C28T		
P	0063800	NPR2	= -FB		
P	0063800		06C25,25*07A43T		
P	0063810	S/PR2	= * +.RESET .		
P	0063810		06C8,8,13, 15		
P	0063811		+ .NCNST .		
P	0063811		06C8,11, 09		
P	0063820	R/PR2	= * +.PH1PD2 .T3D2 .FNT		
P	0063820		06C8,8,10, 02, 03		
P	0063821		+ .GND06C16 .		
P	0063821		06C8,07, 05		

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L
P	0063950		NPR2-1	=I .PR2			
P	0063950			16C01,11,	10,01-08C45T		
P	0064000		NPR2F	=-F8F			
P	0064000			06C21			
P	0064100		PRCH	=-FB			
P	0064100			05A27,27-08C01T			
P	0064200		NPRCH	=-NFB			
P	0064200			05A26			
P	0064210		S/PRCH	=* +.PH10201 .T101-00 .PC			
P	0064210			05A\$, \$, 19,	17,	18,	14
P	0064211			+ .GND05A16			
P	0064211			05A\$, 01			
P	0064220		R/PRCH	=* +.GND05A16			
P	0064220			05A\$, \$, 04			
P	0064221			+ .T001-00 .			
P	0064221			05A\$, 06,	12,	08	
P	0064600		RESET	=I .NRESET			
P	0064600			17A05,02,	20X,05-25B27T		
P	0064650		RESET-1	=I .NRESET			
P	0064650			20B11,12			
P	0064700		NRESET	=I .RI8			
P	0064700			11A36,37,	44,36-08C04T		
P	0064701			I .TRR			
P	0064701			20B06,08,	07,	14	
P	0064800		RI8	=-CR */RI8/			
P	0064800			12C38,\$			
P	0064810		/RI9/	=-CD *GND12C32			
P	0064810			12C\$, 37			
P	0064900		RS	=-CR */RS/			
P	0064900			14B27,\$			
P	0064910		/RS/	=-NS			
P	0064910						
P	0065000		NRS	=I .RS			
P	0065000			17C35,38,	43,35-08C05T		
P	0065100		RSA	=B .RSA1	.NRSA2		
P	0065100			15B46,40,	41		

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS														
	1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	123553-001	111	C/
P	0065110		/RSA/	=-CD	*RSA															
P	0065110			14C	,03															
P	0065200		RSA1	=-NFB																
P	0065200			10C22	,22-17C47T															
P	0065300		NRSA1	=-FB																
P	0065300			10C20																
P	0065310		S/RSA1	=*	+PH5D1-1	.T2D1-10	.BRD	.CM007												
P	0065310			10C	,28,	36,	34,	33												
P	0065311				+PH1PD1	.T4D1-20	.NOUT													
P	0065311			10C	,31,	30,	29													
P	0065312				+PH7PD1	.T3D1-10														
P	0065312			10C	,37,	35														
P	0065313				+GND10C32															
P	0065313			10C	,40															
P	0065320		R/RSA1	=*	+PH7D1	.T0D1-30	.TBRD													
P	0065320			10C	,42,	44,	46,	50,	38											
P	0065321				+PH102D1	.T0D1-30	.													
P	0065321			10C	,39,	41,	43													
P	0065322				+GND10C32	.														
P	0065322			10C	,45,	47														
P	0065400		NRSA1F	=I	.CM036	.NED														
P	0065400			02C26	,29X,	24														
P	0065401			I	.CM036	.TRA1														
P	0065401			02C25	,29X,	23														
P	0065402			I	.CM036	.FP														
P	0065402			02C27	,29X,	22														
P	0065403			I	.PH1T2D1	.BRD	.NOUT	.NTRA1												
P	0065403			11C15	,30,	18,	31,	17												
P	0065404			I	.CM037	.NBRD	.NOUT	.NED												
P	0065404			11C14	,21,	20,	29,	19												
P	0065405			I	.CM037	.NBRD	.NOUT	.TRA1												
P	0065405			11C34	,24,	23,	22,	28												
P	0065406			I	.PH2PD1	.T4D1-30	.													
P	0065406			02C06	,14,	08,	07													
P	0065407			-FBF																
P	0065407			10C24																
P	0065500		RSA2	=-FB																
P	0065500			10C25	,25-08C06T															
P	0065600		NRSA2	=-NFB																
P	0065600			10C23	,23-11C47T															

CODE	LINE NO.	CHC	LOGIC	EQUATIONS	PINS	REMARKS												
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	112	C/
																	123653-001	F
																	03713	
P	0065610		S/RSA2	=* +.NRS	.	.												
P	0065610			10C\$, \$, 10,	02,	03												
P	0065611			+ .RESET-1	.	.												
P	0065611			10C\$, 05,	07													
P	0065620		R/RSA2	=* +.PH192D1	.T1D1=20													
P	0065620			10C\$, \$, 15,	13													
P	0065621			+ .PH7T1D1	.TBRD													
P	0065621			10C\$, 11,	09													
P	0065750		/RST/	=-CD *RESET-1														
P	0065750			14C\$, 02														
P	0065800		RSA2F	=-FBF														
P	0065800			10C21														
P	0065900		S15	=B* +.NSX0-0	.S15													
P	0065900			21B26X, \$, \$, 23X,	26X													
P	0065901			+ .BA0	.SXBA=0													
P	0065901			21B\$, 25,	18X													
P	0065902			+ .GND21B16	.													
P	0065902			21B\$, 22X,	24													
P	0066000		S16	=B* +.NSX0-0	.S16													
P	0066000			21B27X, \$, \$, 23X,	27X													
P	0066001			+ .BA1	.SXBA=0													
P	0066001			21B\$, 28,	18X													
P	0066002			+ .GND21B16	.													
P	0066002			21B\$, 22X,	29													
P	0066100		S25	=B* +.NSX0-1	.S25													
P	0066100			21B39X, \$, \$, 36X,	39X													
P	0066101			+ .BA10	.SXBA=1													
P	0066101			21B\$, 35,	37X													
P	0066102			+ .GND21B16	.SX20													
P	0066102			21B\$, 34,	38X													
P	0066200		S26	=B* +.NSX0-1	.S26													
P	0066200			21B42X, \$, \$, 36X,	42X													
P	0066201			+ .BA11	.SXBA=1													
P	0066201			21B\$, 41,	37X													
P	0066202			+ .SX20	.													
P	0066202			21B\$, 38X,	40													
P	0066300		S27	=B* +.NSX0-1	.S27													
P	0066300			22B02X, \$, \$, 43X,	02X													
P	0066301			+ .BA12	.SXBA=1													
P	0066301			22B\$, 31,	37X													
P	0066302			+ .GND22B32	.													
P	0066302			22B\$, 38X,	33													

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CODE	LINE NO.	LOGIC	EQUATIONS	PINS	REMARKS
		SIGMA 1-3-71			
P	0067100	S20	=B* +.NSX0=0	.S20	
P	0067100		21B46X,\$,\$,30X,46X		
P	0067101		+ .BA5	.SXBA=0	
P	0067101		21B\$,47,	13X	
P	0067102		+ .GND21B16	.	
P	0067102		21B\$,05X,	50	
P	0067200	S21	=B* +.NSX0=0	.S21	
P	0067200		21B09X,\$,\$,30X,09X		
P	0067201		+ .BA6	.SXBA=0	
P	0067201		21B\$,08,	13X	
P	0067202		+ .GND21B16	.	
P	0067202		21B\$,05X,	06	
P	0067300	S22	=B* +.NSX0=0	.S22	
P	0067300		21B07X,\$,\$,30X,07X		
P	0067301		+ .BA7	.SXBA=0	
P	0067301		21B\$,04,	13X	
P	0067302		+ .GND21B16	.	
P	0067302		21B\$,05X,	03	
P	0067400	S23	=B* +.NSX0=1	.S23	
P	0067400		21B02X,\$,\$,43X,02X		
P	0067401		+ .BA8	.SXBA=1	
P	0067401		21B\$,31,	37X	
P	0067402		+ .GND21B16	.SX20	
P	0067402		21B\$,33,	38X	
P	0067500	S24	=B* +.NSX0=1	.S24	
P	0067500		21B01X,\$,\$,43X,01X		
P	0067501		+ .BA9	.SXBA=1	
P	0067501		21B\$,45,	37X	
P	0067502		+ .GND21B16	.SX20	
P	0067502		21B\$,44,	38X	
P	0067600	SC	=-CR */SC/		
P	0067600		32A40,\$		
P	0067610	/SC/	=-CD *GND32A16		
P	0067610		32A\$,39		
P	0067611	/SI9/	=-CD *F3		
P	0067611		14C\$,12		
P	0067612	I/SENSED1	=* +.PLED1	.PWD1	
P	0067612		05D15,15,08,06		
P	0067613		+ .TOD1	.PWD1	
P	0067613		05D15,12,	10	
P	0067615	SENSEOD1	=-DL		
P	0067615		05D46		

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CODE	LINE NO.	CHK	LOGIC	EQUATIONS	PINS	REMARKS										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
P	0067620		SENSE1D1	=-DL												
P	0067620			05D34												
P	0067630		SENSE2D1	=-DL												
P	0067630			05D21												
P	0067640		SENSE3D1	=-DL												
P	0067640			05D19												
P	0067650		SENSE4D1	=-DL												
P	0067650			05D03												
P	0067655		SENSE5D1	=-DL												
P	0067655			05D36												
P	0067657		I/SENSED2	=* +.PLED2	.PWD2											
P	0067657			07D15,15,08,	06											
P	0067658			+ .TOD2	.PWD2											
P	0067658			07D15,12,	10											
P	0067660		SENSE0D2	=-DL												
P	0067660			07D46												
P	0067670		SENSE1D2	=-DL												
P	0067670			07D34												
P	0067680		SENSE2D2	=-DL												
P	0067680			07D18												
P	0067690		SENSE3D2	=-DL												
P	0067690			07D02												
P	0067695		SENSE4D2	=-DL												
P	0067695			07D11												
P	0067697		SENSE5D2	=-DL												
P	0067697			07D40												
P	0067698		SPA1	=B .A1	.NA0=1											
P	0067698			15B34,22,	23,23,24,34-32C22C-32D22C											
P	0067699		SPA2	=B .A2	.NA0=1											
P	0067699			15B33,25,	27, 26,33-32C23C-32D23C											
P	0067700		SPA3=0	=B .NA0-1	.A3											
P	0067700			15B45,39,	42,45-19D05T-32C18C-32D18C											
P	0067800		NSPA3=0	=I .NA0	.A3											
P	0067800			29A15,30,18,31,17,15-19D07T-32C20C-32D20C												

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
			SIGMA 1-07P-571			
P	0067900		=B	.NA0-1	.A3	
P	0067900		15B35,38,		43,35-15D06T-32C19C-32D19C	
P	0068000		=I	.NA0	.A3	
P	0068000		29A14,21,20,29,		19,14-11D06T-32C21C-32D21C	
P	0068200		=B	.NA0-1	.A4	
P	0068200		15B36,44,		37,36-19D06T-32C43C-32D43C	
P	0068300		=I	.NA0	.A4	
P	0068300		29A34,24,23,22,		28,34-19D06T-32C45C-32D45C	
P	0068400		=B	.NA0-1	.A4	
P	0068400		15B01,10,		11,01-15D06T-32C44C-32D44C	
P	0068500		=I	.NA0	.A4	
P	0068500		29A33,26,		25, 27,33-11D06T-32C46C-32D46C	
P	0068700		=I	.A0	.NA1	
P	0068700		29A02,03,		09,02-19D39T-31C19C-31D19C	
P	0068701		I	.NA0	.NA5	
P	0068701		29A46,40,		41	
P	0068800		=I	.A0	.A1	
P	0068800		29A12,06,		05, 07,12-19D42T-31C21C-31D21C	
P	0068801		I	.NA0	.A5	
P	0068801		29A13,04,		08	
P	0068900		=I	.A0	.NA1	
P	0068900		29A36,44,		37,36-11D39T-31C20C-31D20C	
P	0068901		I	.NA0	.NA5	
P	0068901		29A01,10,		11	
P	0069000		=I	.NA0	.A5	
P	0069000		29A35,38,		43,35-11D42T-31C22C-31D22C	
P	0069001		I	.A0	.A1	
P	0069001		29A45,39,		42	
P	0069200		=B* +.GND31A16	.SPA6-0		
P	0069200		31A02X,4,9,43X,		02X,02X-19D44T-31C23C-31D23C	
P	0069201		+ .A6	.NA0-1		
P	0069201		31A5,31,		37X	
P	0069202		+ .A2	.A0		
P	0069202		31A5,33,		38X	
P	0069300		=B* +.GND31A16	.SPA6-1		
P	0069300		31A01X,5,9,43X,		01X,01X-11D44T-31C24C-31D24C	
P	0069301		+ .A6	.NA0-1		
P	0069301		31A5,45,		37X	
P	0069302		+ .A2	.A0		
P	0069302		31A5,44,		32X	

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS	C/L									
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70
			SP7-0													
P	0069400		SPA7-0	=B* +.GND31A16	.SPA7-0											
	0069400			31A39X,35,36X,39X,39X-19D40T-31C43C-31D43C												
	0069401			+A7	.NA0-1											
P	0069401			31A35,35,	37X											
	0069402			+A3	.A0											
P	0069402			31A34,34,	38X											
	0069500		SPA7-1	=B* +.GND31A16	.SPA7-1											
P	0069500			31A42X,35,36X,42X,42X-11D40T-31C44C-31D44C												
	0069501			+A7	.NA0-1											
P	0069501			31A34,41,	37X											
	0069502			+A3	.A0											
P	0069502			31A34,40,	38X											
	0069600		SUB	=-NFB												
P	0069600			23B23,23*25B28T												
	0069620		SUB-1	=I	.NSUBF											
P	0069620			20B18,20X,	04,18-25B29T											
	0069640		SUB-2	=I	.NSUBF											
P	0069640			20B19,20X,	03,19-25B30T											
	0069660		SUB-3	=I	.NSUBF											
P	0069660			20B05,20X,	02,05-25B31T											
	0069680		SUB-4	=I	.NSUBF											
P	0069680			20B17,20X,	01,17-25B33T											
	0069700		NSUB	=-FB												
P	0069700			23B25												
	0069710		S/SUB	=* +.GND23B32												
P	0069710			23B3,3,15,	13											
	0069711			+PH2T2D2												
P	0069711			23B5,11,	09											
	0069720		R/SUB	=* +.PH3D1	.T0D1-10	.NH4										
P	0069720			23B3,3,10,	02,	03										
	0069721			+PH4D1	.T0D1-10											
P	0069721			23B3,05,	07											
	0069800		NSUBF	=-FBF												
P	0069800			23B21												
	0069900		NSX0-0	=B	.NCM012	.NCM011	.NCM010	.NRESET								
P	0069900			18B15,30,	18,	31,	17,15-04B47T									
	0070000		NSX0-1	=B	.NCM012	.NCM011	.NCM010	.NRESET								
P	0070000			18B14,21,	20,	29,	19									

CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	8	9	10	15 20 25 30 35 40 45 50 55 60 65 70
P	0070100		SX20	=I .SX20I	.NPH12PD1 .NCM012	
P	0070100			16B34, 24,	23, 22,	28, 34-25B34T
P	0070200		SX20I	=I .PH2D2	.CM044 .NPH1PD2	
P	0070200			16B33, 26,	25, 27, 33-	25B46T
P	0070300		NSXBA	==NF3		
P	0070300			29C23		
P	0070310		S/SXBA=0	=* +.GND29C16	.	.
P	0070310			29C\$, \$, 10,	02,	03
P	0070311			+.PH184D1	.TOD1-30	
P	0070311			29C\$, 03,	07	
P	0070320		R/SXBA=0	=* +.T1D1D	.	
P	0070320			29C\$, \$, 15,	13	
P	0070321			+.RESET	.	
P	0070321			29C\$, 11,	09	
P	0070400		SXBAF	==FBF		
P	0070400			29C21		
P	0070500		SXBA=0	==FB		
P	0070500			29C25, 25-	25B35T	
P	0070600		SXBA=1	=B .SXBAF	.	
P	0070600			18B01, 10,	11	
P	0070650		TOD1	==BDS * SENSE0D1		
P	0070650			06D06, 27, 06-09C25C-09D25C-08C12T-10D41T		
P	0070651			-IDS * SENSE1D1		
P	0070651			06D01, 40		
P	0070700		TOD1-00	==CLD		
P	0070700			09B47, 47-04A30T-11A47T		
P	0070725		TOD1-10	==CLD		
P	0070725			09B45, 45-16B50T-25B47T		
P	0070750		TOD1-20	==CLD		
P	0070750			09B44, 44-04B43T-17C50T		
P	0070775		TOD1-30	==CLD		
P	0070775			09B43, 43-25B50T-29A47T		
P	0070800		I/TOD1	=* +.TOD1	.	
P	0070800			09B\$, \$, 42,	41	
P	0070900		TOD2	==BDS * SENSE0D2		
P	0070900			08D26, 43, 26-09C17C-09D17C-10D30T-19B47T		

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CODE	LINE NO.	CHK	LOGIC	EQUATIONS	PINS	REMARKS	C/L										
1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	
				SIGMA 1-7-67													
P	0071000		NT002														
	0071000																
	0071050		T101														
P	0071050																
	0071051																
P	0071051																
	0071100		T101-00														
P	0071100																
	0071130		T101-10														
P	0071130																
	0071160		T101-20														
P	0071160																
	0071180		T101-30														
P	0071180																
	0071195		I/T101														
P	0071195																
	0071200		T101D														
P	0071200																
	0071300		T102														
P	0071300																
	0071301																
P	0071301																
	0071325		T201														
P	0071325																
	0071350		T201-00														
P	0071350																
	0071370		T201-10														
P	0071370																
	0071390		T201-20														
P	0071390																
	0071393		I/T201														
P	0071393																
	0071395		T202														
P	0071395																
	0071400		T202-0														
P	0071400																

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
			STJMA 1-0-V-P-5471			
P	0071420		I/T2D2	==* +.T2D2	.VT3D2	
	0071420			09B\$, \$, 06,	07	
P	0071500		T3D1-00	==CLD		
	0071500			09B23, 23-04A47T		
P	0071510		T3D1-10	==CLD		
	0071510			09B22, 22-08C35T		
P	0071520		I/T3D1	==* +.T3D1	.	
	0071520			09B\$, \$, 19,	24	
P	0071550		T3D1	==BDS * SENSE3D1		
	0071550			06D07, 23, 07-09C28C-09D28C-08C24T-10D44T		
	0071551			-IDS * SENSE4D1		
	0071551			06D18, 20		
P	0071600		NT3D1	==IDS * SENSE3D1		
	0071600			06D03, 46, 03-09C02C-09D02C-08C22T		
P	0071700		T3D2	==BDS * SENSE3D2		
	0071700			08D28, 45, 28-09C20C-09D20C-10D34T-09A47T		
	0071701			-BDS * SENSE3D2		
	0071701			08D29, 47		
P	0071800		NT3D2	==IDS * SENSE3D2		
	0071800			08D03, 46, 03-09C03C-09D03C-08C23T		
P	0071850		T4D1	==BDS * SENSE4D1		
	0071850			06D17, 22, 17-09C29C-09D29C-08C29T-10D45T		
P	0071900		T4D1-0	==CLD		
	0071900			09B15, 15-08C17T		
P	0071925		T4D1-10	==CLD		
	0071925			09B14, 14-08C41T-29A50T		
P	0071950		T4D1-20	==CLD		
	0071950			09B13, 13-08C30T-11A50T		
P	0071975		T4D1-30	==CLD		
	0071975			09B11, 11-04B23T-08C15T		
P	0071990		I/T4D1	==* +.T4D1	.	
	0071990			09B\$, \$, 08,	09	
P	0072100		T4D2	==BDS * SENSE4D2		
	0072100			08D07, 23, 07-09C21C-09D21C-10D35T-08C18T		
P	0072150		/T1B/	==CD *F4		
	0072150			14C\$, 19		

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS
	1	2	3	4	5	6
	7	8	9	10	11	12
	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
	43	44	45	46	47	48
	49	50	51	52	53	54
	55	56	57	58	59	60
	61	62	63	64	65	66
	67	68	69	70	71	72
	73	74	75	76	77	78
	79	80	81	82	83	84
	85	86	87	88	89	90
	91	92	93	94	95	96
	97	98	99	100	101	102
	103	104	105	106	107	108
	109	110	111	112	113	114
	115	116	117	118	119	120
	121	122	123	124	125	126
	127	128	129	130	131	132
	133	134	135	136	137	138
	139	140	141	142	143	144
	145	146	147	148	149	150
	151	152	153	154	155	156
	157	158	159	160	161	162
	163	164	165	166	167	168
	169	170	171	172	173	174
	175	176	177	178	179	180
	181	182	183	184	185	186
	187	188	189	190	191	192
	193	194	195	196	197	198
	199	200	201	202	203	204
	205	206	207	208	209	210
	211	212	213	214	215	216
	217	218	219	220	221	222
	223	224	225	226	227	228
	229	230	231	232	233	234
	235	236	237	238	239	240
	241	242	243	244	245	246
	247	248	249	250	251	252
	253	254	255	256	257	258
	259	260	261	262	263	264
	265	266	267	268	269	270
	271	272	273	274	275	276
	277	278	279	280	281	282
	283	284	285	286	287	288
	289	290	291	292	293	294
	295	296	297	298	299	300
	301	302	303	304	305	306
	307	308	309	310	311	312
	313	314	315	316	317	318
	319	320	321	322	323	324
	325	326	327	328	329	330
	331	332	333	334	335	336
	337	338	339	340	341	342
	343	344	345	346	347	348
	349	350	351	352	353	354
	355	356	357	358	359	360
	361	362	363	364	365	366
	367	368	369	370	371	372
	373	374	375	376	377	378
	379	380	381	382	383	384
	385	386	387	388	389	390
	391	392	393	394	395	396
	397	398	399	400	401	402
	403	404	405	406	407	408
	409	410	411	412	413	414
	415	416	417	418	419	420
	421	422	423	424	425	426
	427	428	429	430	431	432
	433	434	435	436	437	438
	439	440	441	442	443	444
	445	446	447	448	449	450
	451	452	453	454	455	456
	457	458	459	460	461	462
	463	464	465	466	467	468
	469	470	471	472	473	474
	475	476	477	478	479	480
	481	482	483	484	485	486
	487	488	489	490	491	492
	493	494	495	496	497	498
	499	500	501	502	503	504
	505	506	507	508	509	510
	511	512	513	514	515	516
	517	518	519	520	521	522
	523	524	525	526	527	528
	529	530	531	532	533	534
	535	536	537	538	539	540
	541	542	543	544	545	546
	547	548	549	550	551	552
	553	554	555	556	557	558
	559	560	561	562	563	564
	565	566	567	568	569	570
	571	572	573	574	575	576
	577	578	579	580	581	582
	583	584	585	586	587	588
	589	590	591	592	593	594
	595	596	597	598	599	600
	601	602	603	604	605	606
	607	608	609	610	611	612
	613	614	615	616	617	618
	619	620	621	622	623	624
	625	626	627	628	629	630
	631	632	633	634	635	636
	637	638	639	640	641	642
	643	644	645	646	647	648
	649	650	651	652	653	654
	655	656	657	658	659	660
	661	662	663	664	665	666
	667	668	669	670	671	672
	673	674	675	676	677	678
	679	680	681	682	683	684
	685	686	687	688	689	690
	691	692	693	694	695	696
	697	698	699	700	701	702
	703	704	705	706	707	708
	709	710	711	712	713	714
	715	716	717	718	719	720
	721	722	723	724	725	726
	727	728	729	730	731	732
	733	734	735	736	737	738
	739	740	741	742	743	744
	745	746	747	748	749	750
	751	752	753	754	755	756
	757	758	759	760	761	762
	763	764	765	766	767	768
	769	770	771	772	773	774
	775	776	777	778	779	780
	781	782	783	784	785	786
	787	788	789	790	791	792
	793	794	795	796	797	798
	799	800	801	802	803	804
	805	806	807	808	809	810
	811	812	813	814	815	816
	817	818	819	820	821	822
	823	824	825	826	827	828
	829	830	831	832	833	834
	835	836	837	838	839	840
	841	842	843	844	845	846
	847	848	849	850	851	852
	853	854	855	856	857	858
	859	860	861	862	863	864
	865	866	867	868	869	870
	871	872	873	874	875	876
	877	878	879	880	881	882
	883	884	885	886	887	888
	889	890	891	892	893	894
	895	896	897	898	899	900
	901	902	903	904	905	906
	907	908	909	910	911	912
	913	914	915	916	917	918
	919	920	921	922	923	924
	925	926	927	928	929	930
	931	932	933	934	935	936
	937	938	939	940	941	942
	943	944	945	946	947	948
	949	950	951	952	953	954
	955	956	957	958	959	960
	961	962	963	964	965	966
	967	968	969	970	971	972
	973	974	975	976	977	978
	979	980	981	982	983	984
	985	986	987	988	989	990
	991	992	993	994	995	996
	997	998	999	1000	1001	1002

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CODE	LINE NO.	CHG	LOGIC	EQUATIONS	PINS	REMARKS														
	1	2	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	123553-001	122	CZ
P	0073100		NTRA1	=-FB																
P	0073100				28C25,25	08C07T														
P	0073110		S/TRA1	=* +.CM030																
P	0073110				28C\$, \$, 15,						13									
P	0073111				+ .PH5PD1						.T4D1-10									
P	0073111				28C\$, 11,						09									
P	0073120		R/TRA1	=* +.PH4T001		.NCMD														
P	0073120				28C\$, \$, 10,						02,									03
P	0073121				+ .PH2T102															
P	0073121				28C\$, 05,						07									
P	0073200		NTRA1F	=I .PH13T0		.CM015														
P	0073200				18C33, 25,						25,									27
P	0073201				-FBF															
P	0073201				28C2:															
P	0073250		TRR	=-CR */NTR/																
P	0073250				01D38, \$, 38-	09D05C-09C05C														
P	0073251		/NTR/	=-NS																
P	0073251																			
P	0073300		UN0	=-SC																
P	0073300				13C45															
P	0073350		NUN0	=-SC																
P	0073350				13C47															
P	0073400		UN1	=-SC																
P	0073400				13C46															
P	0073450		NUN1	=-SC																
P	0073450				13C27															
P	0073500		UN2	=-SC																
P	0073500				13C03															
P	0073550		NUN2	=-SC																
P	0073550				13C19															
P	0073600		W0	=3* +.NWX0		.W0														
P	0073600				26A02X, \$, \$, 43X,	02X														
P	0073601				+ .WX1															
P	0073601				26A\$, 37X,						31									
P	0073602				+ .M30XI															
P	0073602				26A\$, 33,						38X									

