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SOLID STATE SEQUENCER SYSTEM

PHASE II

SUMMARY REPORT

MARCH 1971

APPENDIX B

Wiring Lists

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HOUSTON, TEXAS 77058

MARTIN MARIETTA CORPORATION
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SOLID STATE SEQUENCER SYSTEM

PHASE II

SUMMARY REPORT

MARCH 1971

APPENDIX B

Wiring Lists

Approved by

David E. Leck

David E. Leck
Program Manager

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APPENDIX B

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Explanation of Wiring Information

The sequencer is divided into an upper housing and a base housing. The base contains the power supply and the large components associated with the output switches. Wiring information for the base housing is contained in the power supply schematic (5300-42) and the output switch base plate and boards schematic (5300-41). The upper housing is divided into two separate sections where the board assemblies are mounted on mother boards. For each of these mother boards, wiring information is presented in an alphabetical listing by signal name and in a connector listing by pin number. In addition a pin listing is given for each case I/O connector and for the connectors between the base and upper housing. A separate list which shows all connections to the pyro circuits is given in Table 1.

The following examples show how the information is arranged on the wire listings:

a) All wires with same signal name are wired together

B) Below is an explanation of column headings

Level and Connector Location or External Connector No. Column (1-4)	Connector Pin Number Column (8-9)	Signal Name Column (12-27)	Loading Column (30-31)	Notes Column (52-62)
(EXAMPLES):				
A24 J53	63	SW PWR AVAIL*	9	GEN 30
J09	11	STOP (L) A**		

---

* SW PWR AVAIL signal is generated on Board A24J53, Pin 63, with fanout of 30 loads. Nine (9) loads are used on A24J53.

** STOP (L) A signal comes out on External connector J09; Pin 11.

FOLDOUT FRAME 1

TABLE I APPEN

PFC NO.	CIRCUIT BOARD CONNECTOR PIN NO.	MANUAL INPUT CONNECTOR PIN NO	TEST POINT CONNECTOR PIN NO.	FUSE MODULE PIN NO.	FUSISTOR MODUL	
					INPUT PIN NO.	OUTPUT PIN NO.
1	A6J23-S	J4-43	J8-1	J18-1	J21-39	J21-3
2	A6J23-U	J4-45	J8-2	J18-8	J21-44	J21-4
3	A6J23-O		J8-3	J18-10	J21-49	J21-4
4	A6J24-S		J8-4	J18-12	J20-21	J20-2
5	A6J24-U		J8-5	J18-14	J20-25	J20-2
6	A7J24A-M	J4-31	J8-6	J18-16	J22-21	J22-2
7	A7J24A-Q	J4-33	J8-7	J18-18	J22-17	J22-1
8	A8J23B-S	J04-9	J8-8	J18-20	J22-25	J22-3
9	A7J23A-S	J4-27	J8-9	J18-22	J22-29	J22-3
10	A7J23A-U	J4-29	J8-10	J18-24	J22-33	J22-3
11	A8J23B-M	J4-1	J8-11	J18-26	J21-59	J21-6
12	A7J24A-O		J8-12	J18-28	J21-21	J21-3
13	A8J24B-Q	J4-35	J8-13	J18-30	J22-19	J22-3
14	A8J24B-M	J4-37	J8-14	J18-32	J22-2	J22-3
15	A8J23B-O	J4-5	J8-15	J19-1	J21-25	J21-3
16	A7J24A-S		J8-16	J19-8	J20-29	J20-3
17	A7J24A-U		J8-17	J19-10	J20-33	J20-3
18	A8J23B-Q	J4-3	J8-18	J19-12	J21-29	J21-3
19	A7J23A-M	J4-11	J8-19	J19-14	J20-19	J20-9
20	A7J23A-O	J4-13	J8-20	J19-16	J20-11	J20-1
21	A8J24B-U	J4-23	J8-21	J19-18	J22-11	J22-1
22	A8J24B-S	J4-25	J8-22	J19-20	J22-15	J22-1
23	A7J23A-Q	J4-15	J8-23	J19-22	J20-15	J20-1
24	A6J24-M	J4-17	J8-24	J19-24	J21-5	J21-6
25	A6J24-Q	J4-19	J8-25	J19-26	J21-33	J21-34
26	A6J23-M	J4-7	J8-26	J19-28	J21-13	J21-8
27	A6J23-Q	J4-21	J8-27	J19-30	J20-17	J20-18
28	A6J24-O					
			J8-28	J19-32	J20-2	J20-3

FOLDOUT FRAME 2

ONNECTIONS	OUTPUT CONNECTOR				OUTPUT SIGNAL NAME
.1 OUTPUT NO2 PIN NO.	OUTPUT NO 1		OUTPUT NO. 2		
	SIGNAL	RETURN	SIGNAL	RETURN	
J21-40	J5-1	J5-2	J5-3	J5-4	LM-SLA SEP (PYROS 1 & 2)
J21-45	J5-5	J5-6	J5-7	J5-8	LM-SLA SEP (PYROS 3 & 4)
J21-50	J5-9	J5-10	J5-11	J5-12	CUT LM-LV UMB
J20-22	J12-21	J12 22	J12-23	J12-24	CM-SM DEADFACE (PYROS 1 & 2)
J20-26	J12-25	J12-26	J12-27	J12-28	CM-SM DEADFACE (PYROS 3 & 4)
J22-22	J6-1	J6-2	J6-3	J6-4	OXIDIZER DUMP (PYROS 1 & 2)
	J6-5	J6-6			OXIDIZER DUMP (PYRO 3)
J22-26	J6-7	J6-8	J6-9	J6-10	CM RCS PRESSURIZATION
J22-30	J6-11	J6-12	J6-13	J6-14	CM-SM SEP (PYROS 1 & 2)
J22-34	J6-15	J6-16	J6-17	J6-18	CM-SM SEP (PYROS 3 & 4)
	J5-21	J5-22			LES MOTOR FIRE
	J5-23	J5-24			PITCH CONTROL MOTOR FIRE
J22-8	J6-19	J6-20	J6-21	J6-22	FUEL DUMP (PYROS 1 & 2)
	J6-23	J6-24			FUEL DUMP (PYRO 3)
	J5-25	J5-26			CANARD DEPLOY
J20-30	J12-1	J12-2	J12-3	J12-14	TOWER LEG NUTS (PYROS 1 & 2)
J20-34	J12-5	J12-6	J12-7	J12-8	TOWER LEG NUTS (PYROS 3 & 4)
	J5-27	J5-28			ET JET MOTOR
J20-8	J12-9	J12-10	J12-11	J12-12	APEX COVER JETTISON
J20-12	J12-13	J12-14	J12-15	J12-16	DROGUE CHUTE DEPLOY
J22-12	J6-25	J6-26	J6-27	J6-28	CM RCS PURGE (PYROS 1 & 2)
J22-16	J6-29	J6-30	J6-31	J6-32	CM RCS PURGE (PYROS 3 & 4)
J20-16	J12-17	J12-18	J12-19	J12-20	DISCONNECT DROGUE CHUTE
J21-17	J5-13	J5-14	J5-15	J5-16	DEPLOY PILOT CHUTE (PYROS 1 & 2)
	J5-17	J5-18			DEPLOY PILOT CHUTE (PYRO 3)
	J5-19	J5-20			CSM-SLA SEP
	J12-29	J12-30			LM DOCKING RING SEP
	J12-31	J12-32			ENABLE LANYARD SW.
	J12-33	J12-34			LANYAR SW CLOSED
	J12-35	J12-36			APEX COVER DROGUE CHUTE DEPLOY

Mother Board 1 Wiring List

(Output Switches & Pyro Firing Circuits)

J11 4D	ACT 11K BAROSW-T	
A09J26 I	ACT 11K BAROSW-T	OUTPUT
J07 21	ACT 11K BAROSW	FROM 100MA SW 4
A09J26 2J	ACT 11K BARO SW	OUTPUT
J07 22	ACT 11K BSW RET	GND 4
A12J27 0	ADDRESS 0A	
A07J24A2A	ADDRESS 0A	
A09J26 P	ADDRESS 0A	
A11J27 P	ADDRESS 0A	MB TRACE
A11J27 Q	ADDRESS 0A	MB TRACE
A12J27 J	ADDRESS 0A	OUTPUT
A07J24A2I	ADDRESS 0B	
A09J26 T	ADDRESS 0B	
A11J27 2C	ADDRESS 0B	MB TRACE
A11J27 2B	ADDRESS 0B	MB TRACE
A12J27 2A	ADDRESS 0B	
A12J27 V	ADDRESS 0B	OUTPUT
A09J25 R	ADDRESS 00A	
A09J26 Y	ADDRESS 00A	
A11J27 R	ADDRESS 00A	
A11J29 2A	ADDRESS 00A	
A12J27 R	ADDRESS 00A	INPUT
A12J27 T	ADDRESS 00A	MB TRACE
A09J25 2D	ADDRESS 00B	
A09J26 2G	ADDRESS 00B	
A11J27 2D	ADDRESS 00B	
A11J29 2G	ADDRESS 00B	
A12J27 2F	ADDRESS 00B	MB TRACE
A12J27 2D	ADDRESS 00B	MB TRACE
A07J24A2C	ADDRESS 1A	
A09J25 I	ADDRESS 1A	
A09J26 2C	ADDRESS 1A	
A11J29 2E	ADDRESS 1A	
A12J30 2E	ADDRESS 1A	
A07J24A2K	ADDRESS 1B	
A09J25 S	ADDRESS 1B	
A09J26 2K	ADDRESS 1B	
A11J29 2K	ADDRESS 1B	MB TRACE
A12J30 2K	ADDRESS 1B	
A07J24A Y	ADDRESS 10A	MB TRACE
A07J24A X	ADDRESS 10A	MB TRACE
A08J23B W	ADDRESS 10A	
A08J24B Y	ADDRESS 10A	MB TRACE
A08J24B W	ADDRESS 10A	MB TRACE
A07J24A2F	ADDRESS 10B	MB TRACE
A07J24A2G	ADDRESS 10B	MB TRACE
A07J24A2E	ADDRESS 10B	MB TRACE
A08J23B2E	ADDRESS 10B	
A08J24B2G	ADDRESS 10B	MB TRACE
A08J24B2E	ADDRESS 10B	MB TRACE
A06J23 2C	ADDRESS 2A	
A06J24 2C	ADDRESS 2A	
A07J23A2C	ADDRESS 2A	MB TRACE
A08J23B Z	ADDRESS 2A	MB TRACE
A10J27 I	ADDRESS 2A	
A11J27 O	ADDRESS 2A	OUTPUT
A06J23 2K	ADDRESS 2B	
A06J24 2K	ADDRESS 2B	

A07J23A2K	ADDRESS 2B	MB TRACE
A08J23B2H	ADDRESS 2B	MB TRACE
A10J27 U	ADDRESS 2B	
A11J27 2A	ADDRESS 2B	OUTPUT
A06J24 W	ADDRESS 20A	MB TRACE
A06J24 Y	ADDRESS 20A	MB TRACE
A11J27 N	ADDRESS 20A	MB TRACE
A11J27 M	ADDRESS 20A	MB TRACE
A12J30 2A	ADDRESS 20A	
A06J24 2E	ADDRESS 20B	MB TRACE
A11J27 V	ADDRESS 20B	MB TRACE
A11J27 Z	ADDRESS 20B	MB TRACE
A12J30 2G	ADDRESS 20B	
A06J24 2G	ADDRESS 2 B	MB TRACE
A06J23 Z	ADDRESS 3A	
A06J24 2A	ADDRESS 3A	
A07J23A Z	ADDRESS 3A	
A07J24A2B	ADDRESS 3A	
A09J26 2A	ADDRESS 3A	
A10J27 J	ADDRESS 3A	
A10J28 2C	ADDRESS 3A	
A11J29 2C	ADDRESS 3A	OUTPUT
A06J23 2H	ADDRESS 3B	
A06J24 2I	ADDRESS 3B	
A07J23A2H	ADDRESS 3B	
A07J24A2J	ADDRESS 3B	
A09J26 2I	ADDRESS 3B	
A10J27 V	ADDRESS 3B	
A10J28 2K	ADDRESS 3B	
A11J29 2I	ADDRESS 3B	OUTPUT
A07J23A W	ADDRESS 30A	MB TRACE
A07J23A X	ADDRESS 30A	MB TRACE.
A08J23B X	ADDRESS 30A	INPUT
A11J27 T	ADDRESS 30A	
A07J23A2E	ADDRESS 30B	MB TRACE
A07J23A2F	ADDRESS 30B	INPUT
A08J23B2F	ADDRESS 30B	MB TRACE
A11J27 2F	ADDRESS 30B	
A06J23 2A	ADDRESS 4A	
A06J24 2B	ADDRESS 4A	
A07J23A2A	ADDRESS 4A	
A08J24B2A	ADDRESS 4A	
A09J25 O	ADDRESS 4A	
A10J27 Q	ADDRESS 4A	MB TRACE
A10J27 O	ADDRESS 4A	MB TRACE
A12J27 K	ADDRESS 4A	OUTPUT
A06J23 2I	ADDRESS 4B	
A06J24 2J	ADDRESS 4B	
A07J23A2I	ADDRESS 4B	
A08J24B2I	ADDRESS 4B	
A09J25 2A	ADDRESS 4B	
A10J27 2A	ADDRESS 4B	MB TRACE
A10J27 2C	ADDRESS 4B	MB TRACE
A12J27 H	ADDRESS 4B	OUTPUT
A06J23 W	ADDRESS 40A	MB TRACE
A06J23 X	ADDRESS 40A	MB TRACE
A11J27 S	ADDRESS 40A	INPUT
A06J23 2E	ADDRESS 40B	MB TRACE
A06J23 2F	ADDRESS 40B	MB TRACE
A11J27 2E	ADDRESS 40B	INPUT
A06J23 2B	ADDRESS 5A	

A07J23A2B	ADDRESS 5A	
A08J24B2C	ADDRESS 5A	
A10J27 P	ADDRESS 5A	
A11J27 K	ADDRESS 5A	
A12J27 P	ADDRESS 5A	MB TRACE
A12J27 Q	ADDRESS 5A	MB TRACE
A06J23 2J	ADDRESS 5B	
A07J23A2J	ADDRESS 5B	
A08J24B2K	ADDRESS 5B	
A10J27 2B	ADDRESS 5B	
A11J27 W	ADDRESS 5B	MB TRACE
A12J27 2C	ADDRESS 5B	MB TRACE
A12J27 2B	ADDRESS 5B	MB TRACE
A09J26 O	ADDRESS 50A	
A10J27 R	ADDRESS 50A	MB TRACE
A10J27 S	ADDRESS 50A	MB TRACE
A10J28 2B	ADDRESS 50A	
A11J27 L	ADDRESS 50A	MB TRACE
A12J27 M	ADDRESS 50A	INPUT
A09J26 S	ADDRESS 50B	
A10J27 2D	ADDRESS 50B	MB TRACE
A10J27 2E	ADDRESS 50B	MB TRACE
A10J28 2H	ADDRESS 50B	
A11J27 X	ADDRESS 50B	MB TRACE
A12J27 Y	ADDRESS 50B	INPUT
A08J23B2A	ADDRESS 6A	MB TRACE
A08J23B2C	ADDRESS 6A	MB TRACE
A09J26 Q	ADDRESS 6A	MB TRACE
A09J26 Q	ADDRESS 6A	
A10J27 K	ADDRESS 6A	OUTPUT
A12J30 2C	ADDRESS 6A	
A08J23B2K	ADDRESS 6B	MB TRACE
A08J23B2I	ADDRESS 6B	MB TRACE
A09J26 U	ADDRESS 6B	
A10J27 W	ADDRESS 6B	OUTPUT
A12J30 2I	ADDRESS 6B	
A09J25 L	ADDRESS 60A	
A09J26 N	ADDRESS 60A	
A10J27 N	ADDRESS 60A	MB TRACE
A10J27 L	ADDRESS 60A	MB TRACE
A10J27 M	ADDRESS 60A	MB TRACE
A12J27 N	ADDRESS 60A	INPUT
A09J25 X	ADDRESS 60B	
A09J26 R	ADDRESS 60B	
A10J27 Y	ADDRESS 60B	MB TRACE
A10J27 Z	ADDRESS 60B	MB TRACE
A10J27 X	ADDRESS 60B	MB TRACE
A12J27 Z	ADDRESS 60B	INPUT
A08J23B2B	ADDRESS 7A	
A11J27 J	ADDRESS 7A	MB TRACE
A11J27 I	ADDRESS 7A	MB TRACE
A11J29 2D	ADDRESS 7A	OUTPUT
A12J27 I	ADDRESS 7A	OUTPUT
A08J23B2J	ADDRESS 7B	
A11J27 V	ADDRESS 7B	MB TRACE
A11J27 U	ADDRESS 7B	MB TRACE
A11J29 2J	ADDRESS 7B	OUTPUT
A12J27 U	ADDRESS 7B	OUTPUT
A10J27 T	ADDRESS 70A	
A11J29 Z	ADDRESS 70A	MB TRACE
A11J29 2B	ADDRESS 70A	MB TRACE

A12J27	L	ADDRESS 70A	
A12J27	S	ADDRESS 70A	INPUT
A10J27	2F	ADDRESS 70B	
A11J29	2F	ADDRESS 70B	MB TRACE
A11J29	2H	ADDRESS 70B	MB TRACE
A12J27	2E	ADDRESS 70B	INPUT
A12J27	X	ADDRESS 70B	
P63	13	AUTO ABT ENABLE	A15J35-17
J11	31	BECO-T	
A09J25	26	BECO-T	OUTPUT
J07	2	BECO RET	GND 4
J07	1	BECO	
A09J25	2F	BECO	OUTPUT
J07	35	CAUTION LIGHT	TO FRONT PANEL
J08	31	CLOSE LM PRES V	
J18	36	CLOSE LM PRES V	
J21	11	CLOSE LM PRES V	
P04	49	CLOSE LM PRES V	MANUAL ONLY
TB1	33	CLOSE LM PRES V	
J18	37	CLOSE LM P V RET	
P04	50	CLOSE LM P V RET	
J11	38	CL FL ISOL VAL-T	
A10J28	H	CL FL ISOL VAL-T	
P62	48	CL FL ISOL VAL-1	M INPUT
A10J28	G	CL FL ISOL VAL-1	
J07	17	CL FL ISOL VAL	FROM SD 2
P64	12	CL FL ISOL VAL	SD 2 OUTPUT
J07	18	CL FL ISOL V RET	GND 4
P64	28	CL FL ISOL V RET	
J05	35	CL LM PRES V-1	
J21	12	CL LM PRES V-1	
J05	36	CL LM P V-1 RET	
J11	35	CL OX ISOL VAL-T	
A10J28	D	CL OX ISOL VAL-T	
P62	42	CL OX ISOL VAL-1	TM INPUT
A10J28	C	CL OX ISOL VAL-1	
J07	9	CL OX ISOL VAL	FROM SD 1
P64	8	CL OX ISOL VAL	SD 1 OUTPUT
J07	10	CL OX ISOL V RET	GND 4
P64	24	CL OX ISOL V RET	
J11	33	CM-SM PWR XFER-T	
A10J28	N	CM-SM PWR XFER-T	
P62	41	CM-SM PWR XFER-1	TM INPUT
A10J28	M	CM-SM PWR XFER-1	
J07	5	CM-SM PWR XFER	FROM MSD 1
P64	7	CM-SM PWR XFER	MSD 1 OUTPUT
P64	23	CM-SM P XFER RET	
J07	6	CM-SM P XFER RET	GND 4
J11	36	CM-SM RCS XFER-T	
A10J28	P	CM-SM RCS XFER-T	
P62	44	CM-SM RCS XFER-1	M INPUT
A10J28	O	CM-SM RCS XFER-1	
J07	11	CM-SM RCS XFER	FROM MSD 2
J07	13	CM-SM RCS XFER	TO G+N(CM-SM SEP ACC
P64	10	CM-SM RCS XFER	TO G AND N
P64	9	CM-SM RCS XFER	MSD 2 OUTPUT
J07	12	CM-SM RCS XF RET	GND 4
J07	14	CM-SM RCS XF RET	GND 4
P64	25	CM-SM RCS XF RET	
P64	26	CM-SM RCS XF RET	
P63	23	CM SM SEP INIT	A15J35-50

P63	14	FDS ART STG 1	A15J35-15
P63	15	FDS ART STG 2	A15J35-11
P63	24	FLS ENABLE ON	A15J35-44
J11	37	ENABLE CM RCS-T	
A10J28	R	ENABLE CM RCS-T	
A10J28	Q	ENABLE CM RCS-1	
P62	43	ENABLE CM RCS -1	M INPUT
J07	15	ENABLE CM RCS	FROM 0.5A SW 1
P64	11	ENABLE CM RCS	0.5A SW 1 OUTPUT
J11	43	ENABLE SM RCS-T	
A10J28	T	ENABLE SM RCS-T	
A10J28	S	ENABLE SM RCS-1	
P62	45	ENABLE SM RCS -1	M INPUT
J07	31	ENABLE SM RCS	FROM 0.5A SW 2
P64	17	ENABLE SM RCS	0.5A SW 2 OUTPUT
P63	16	ENS ART STG 3	A15J35-8
J07	16	EN CM RCS RET	GND 4
P64	27	EN CM RCS RET	
J11	39	EN ELS BUS-T	
A09J26	K	EN ELS BUS-T	OUTPUT
J07	20	EN ELS BUS RET	GND 4
J07	19	EN ELS BUS	FROM 100MA SW 3
A09J26	2H	EN ELS BUS	OUTPUT
J07	32	EN SM RCS RET	GND 4
P64	33	EN SM RCS RET	
P63	12	ET OFF	A15J35-6
J07	36	FAULT LIGHT	TO FRONT PANEL
J07	60	GND 4	
J07	61	GND 4	
P64	50	GND 4	E29
P64	49	GND 4	E28
A09J25	2N	GND 4	MB TRACE
A09J25	20	GND 4	MB TRACE
A09J26	20	GND 4	MB TRACE
A09J26	2N	GND 4	MB TRACE
A10J27	2N	GND 4	MB TRACE
A10J27	20	GND 4	MB TRACE
A10J28	2N	GND 4	
A10J28	20	GND 4	
A11J27	2N	GND 4	MB TRACE
A11J27	20	GND 4	MB TRACE
A11J29	2N	GND 4	MB TRACE
A11J29	20	GND 4	MB TRACE
A12J27	20	GND 4	MB TRACE
A12J27	2N	GND 4	MB TRACE
A12J30	2N	GND 4	MB TRACE
A12J30	20	GND 4	MB TRACE
MB1	E28	GND 4	MB TRACE
MB1	E29	GND 4	MB TRACE
J08	37	GND 5	
P64	20	GND 5	TB1 17
P64	21	GND 5	TB1 19
A06J23	L	GND 5	MB TRACE
A06J23	K	GND 5	MB TRACE
A06J24	L	GND 5	MB TRACE
A06J24	K	GND 5	MB TRACE
A07J23A	L	GND 5	MB TRACE
A07J23A	K	GND 5	MB TRACE
A07J24A	L	GND 5	MB TRACE
A07J24A	K	GND 5	MB TRACE
A08J23B	K	GND 5	MB TRACE

A08J23B L	GND 5		MB TRACE
A08J24A K	GND 5		MB TRACE
A08J24B L	GND 5		MB TRACE
MB1 E34	GND 5		
MB1 E42	GND 5		
MB1 E51	GND 5		OUTPUT
MB1 E18	GND 5		OUTPUT
MB1 E 3	GND 5		
MB1 E10	GND 5		
J07 33	GOA		TO FRONT PANEL
A12J27 2G	GOA		OUTPUT
J07 34	GOB		TO FRONT PANEL
A12J27 2H	GOB		OUTPUT
J07 37	INITIATE SMJC A		
A11J29 J	INITIATE SMJC A		OUTPUT
J07 38	INITIATE SMJC B		
A11J29 I	INITIATE SMJC B		OUTPUT
P62 3	INPUT MSD 1A		
A10J28 E	INPUT MSD 1A		
P62 19	INPUT MSD 1B		
A10J28 F	INPUT MSD 1B		
P62 5	INPUT MSD 2A		
A11J29 H	INPUT MSD 2A		OUTPUT
P62 21	INPUT MSD 2B		
A11J29 G	INPUT MSD 2B		OUTPUT
A11J27 2J	INPUT PAC 1A,2A		
P62 1	INPUT PAC 1A,2A		
A11J27 2I	INPUT PAC 1B,2B		
A11J27 2L	INPUT PAC 5A,6A		
P62 34	INPUT PAC 5A,6A		
A11J27 2K	INPUT PAC 5B,6B		
P62 7	INPUT SD1A		
A10J27 2G	INPUT SD1A		INPUT
P62 23	INPUT SD1B		
A10J27 2H	INPUT SD1B		INPUT
P62 9	INPUT SD2A		
A10J27 2J	INPUT SD2A		INPUT
P62 25	INPUT SD2B		
A10J27 2I	INPUT SD2B		INPUT
A10J27 2L	INPUT SD 3A,4A		INPUT
P62 11	INPUT SD 3A,4A		
A10J27 2K	INPUT SD 3B,4B		INPUT
P62 27	INPUT SD 3B,4B		
A12J27 2L	INPUT 0.5A SW1A		OUTPUT
P62 29	INPUT 0.5A SW1B		
A12J27 2K	INPUT 0.5A SW1B		OUTPUT
P62 15	INPUT 0.5A SW2A		
A12J27 2J	INPUT 0.5A SW2A		OUTPUT
P62 31	INPUT 0.5A SW2B		
A12J27 2I	INPUT 0.5A SW2B		OUTPUT
A09J25 T	INPUT 100MA 1A		
A09J25 V	INPUT 100MA 1B		
A09J25 W	INPUT 100MA 2A		OUTPUT
A11J27 2G	INPUT 100MA 2A		
A09J25 U	INPUT 100MA 2B		OUTPUT
A11J27 2H	INPUT 100MA 2B		
A09J26 Z	INPUT 100MA 3A		
A09J26 2B	INPUT 100MA 3B		
A09J26 2D	INPUT 100MA 4A		
A09J26 2E	INPUT 100MA 4B		
A09J26 2F	INPUT 100MA 4B		TEST PT

P62	13	INPU 0.5A SW1A	
A06J24	2F	LAND SW CL	INPUT
J08	28	LANYARD SW CL	APEX COVER DROGUE CH
J12	33	LANYARD SW CL	UNPUT FROM LANYARD S
J18	32	LANYARD SW CL	
J20	2	LANYARD SW CL	
TB1	34	LANYARD SW CL	
J12	36	LAN SW CL-1 RET	
J12	35	LAN SW CL-1	APEX COVER DROGUE CH
J20	3	LAN SW CL-1	
J12	34	LAN SW CL RET	
J18	33	LAN SW CL RET	
J07	7	LES ABORT ENABLE	FROM 100MA SW 2
A09J25	2J	LES ABORT ENABLE	OUTPUT
J11	34	LES ABORT EN-T	
A09J25	2I	LES ABORT EN-T	OUTPUT
J07	8	LES ABORT EN RET	GND 4
P63	11	LIFTOFF	A15J35-5
TB1	32	LMD PROBE RTR F	
TB1	2	LMD PROBE RTR 1	
P63	22	LMSLA SEP INIT	A15J35-56
J08	30	LM D PROBE RTR F	
J18	34	LM D PROBE RTR F	
J21	7	LM D PROBE RTR F	
P04	53	LM D PROBE RTR F	MANUAL ONLY
J08	29	LM D PROBE RTR I	
J19	34	LM D PROBE RTR I	
J21	15	LM D PROBE RTR I	
P04	51	LM D PROBE RTR I	MANUAL ONLY
J05	39	LM D PR RTR F-1	
J05	37	LM D PR RTR I-1	
J21	16	LM D PR RTR I-1	
J18	35	LM D P RTR F RET	
P04	54	LM D P RTR F RET	
J19	35	LM D P RTR I RET	
P04	52	LM D P RTR I RET	
J05	40	LM D P R F-1 RET	
J05	38	LM D P R I-1 RET	
J21	2	LM O PR RTR F-1	
P64	47	LOGIC BUSS	E24
P64	48	LOGIC BUSS	E25
A09J25	A	LOGIC BUSS	MB TRACE
A09J25	B	LOGIC BUSS	MB TRACE
A09J26	A	LOGIC BUSS	MB TRACE
A09J26	B	LOGIC BUSS	MB TRACE
A10J27	A	LOGIC BUSS	MB TRACE
A10J27	B	LOGIC BUSS	MB TRACE
A10J28	A	LOGIC BUSS	MB TRACE
A10J28	B	LOGIC BUSS	MB TRACE
A11J27	A	LOGIC BUSS	MB TRACE
A11J27	B	LOGIC BUSS	MB TRACE
A11J29	A	LOGIC BUSS	MB TRACE
A11J29	B	LOGIC BUSS	MB TRACE
A12J27	A	LOGIC BUSS	MB TRACE
A12J27	B	LOGIC BUSS	MB TRACE
A12J30	B	LOGIC BUSS	MB TRACE
A12J30	2L	LOGIC BUSS	MB TRACE+26VC
A12J30	A	LOGIC BUSS	MB TRACE
MB1	E25	LOGIC BUSS	MB TRACE
MB1	E24	LOGIC BUSS	MB TRACE
J19	36	MAIN CHUTE DISC	

P04 47	MAIN CHUTE DISC	MANUAL ONLY
J05 29	MAIN CHUTE DIS-1	
J21 53	MAIN CHUTE DIS-1	
J05 31	MAIN CHUTE DIS-2	
J21 54	MAIN CHUTE DIS-2	
J05 33	MAIN CHUTE DIS-3	
J21 56	MAIN CHUTE DIS-3	
J08 32	MAIN CHUTE DIS	
J21 57	MAIN CHUTE DIS	
TB1 3	MAIN CHUTE DIS	
J19 37	MAIN CH DISC RET	
P04 48	MAIN CH DISC RET	
J05 30	MAIN C DIS-1 RET	
J05 32	MAIN C DIS-2 RET	
J05 34	MAIN C DIS-3 RET	
A09J26 H	MAN RESET 1	INPUT
A09J25 H	MAN RESET 2	
A09J26 G	MAN RESET 2	
A09J25 G	MAN RESET 3	MB TRACE
A10J27 H	MAN RESET 3	MB TRACE
A10J27 G	MAN RESET 4	MB TRACE
A11J27 H	MAN RESET 4	MB TRACE
A11J27 G	MAN RESET 5	MB TRACE
A12J27 H	MAN RESET 5	MB TRACE
A12J27 G	MAN RESET 6	OUTPUT
J07 42	NO GO RET	
P62 39	NO GO RET	
J07 41	NO GO	
P62 38	NO GO	
P63 27	OUTPUT SW RESET	A15J35-26
P63 17	OX DMP ENABLE	A25J35-20
P64 1	PAC-1 MAST PWR	A6J23 H
A06J23 H	PAC-1 MAST PWR	
P64 2	PAC-1 SLAVE PWR	A6J23 E53
A06J23 G	PAC-1 SLAVE PWR	
MB1 E53	PAC-1 SLAVE PWR	OUTPUT
P64 3	PAC-2 MAST PWR	A6J23 J
A06J23 J	PAC-2 MAST PWR	
P64 4	PAC-2 SLAVE PWR	A6J23 E52
A06J23 I	PAC-2 SLAVE PWR	
MB1 E52	PAC-2 SLAVE PWR	OUTPUT
P64 5	PAC-5 MAST PWR	A7J23A H
A07J23A H	PAC-5 MAST PWR	
P64 6	PAC-5 SLAVE PWR	A7J23A E44
A07J23A G	PAC-5 SLAVE PWR	
MB1 E44	PAC-5 SLAVE PWR	OUTPUT
P64 18	PAC-6 MAST PWR	A7J23A J
A07J23A J	PAC-6 MAST PWR	
P64 19	PAC-6 SLAVE PWR	A7J23A E43
A07J23A I	PAC-6 SLAVE PWR	
MB1 E43	PAC-6 SLAVE PWR	OUTPUT
J11 10	PFC-10-T	CM-SM SEP (PYROS 3+4
A07J23A V	PFC-10-T	OUTPUT
J06 16	PFC-10-1 RET	
J06 15	PFC-10-1	CM-SM SEP PYRO 3
J22 32	PFC-10-1	
J06 18	PFC-10-2 RET	
J06 17	PFC-10-2	CM-SM SEP PYRO 4
J22 34	PFC-10-2	
J19 13	PFC-10 RET	
P04 30	PFC-10 RET	

J08 10	PFC-10	CM-SM SEP (PYROS 3+4
J19 12	PFC-10	
J22 33	PFC-10	
P04 29	PFC-10	MANUAL CM-SM SEP NO2
A07J23A U	PFC-10	OUTPUT
MB1 E37	PFC-10	OUTPUT
J11 11	PFC-11-T	LES MOTOR FIRE
A08J23B N	PFC-11-T	OUTPUT
J05 22	PFC-11-1 RET	
J05 21	PFC-11-1	LES MOTOR FIRE
J21 60	PFC-11-1	
J19 29	PFC-11 RET	
P04 2	PFC-11 RET	
J08 11	PFC-11	LES MOTOR FIRE
J19 28	PFC-11	
J21 59	PFC-11	
P04 1	PFC-11	MANUAL LES MOTOR FIR
A08J23B M	PFC-11	OUTPUT
MB1 E33	PFC-11	OUTPUT
J11 12	PFC-12-T	PITCH CONTROL MOTOR
A07J24A P	PFC-12-T	OUTPUT
J05 24	PFC-12-1 RET	
J05 23	PFC-12-1	PITCH CONTROL MOTOR
J21 22	PFC-12-1	
J18 25	PFC-12 RET	
J08 12	PFC-12	PITCH CONTROL MOTOR
J18 24	PFC-12	
J21 21	PFC-12	
A07J24A O	PFC-12	OUTPUT
MB1 E12	PFC-12	OUTPUT
J11 13	PFC-13-T	FUEL DUMP (PYROS 1+2
A08J24B R	PFC-13-T	OUTPUT
J06 20	PFC-13-1 RET	
J06 19	PFC-13-1	FUEL DUMP PYRO 1
J22 36	PFC-13-1	
J06 22	PFC-13-2 RET	
J06 21	PFC-13-2	FUEL DUMP PYRO 2
J22 8	PFC-13-2	
J18 19	PFC-13 RET	
P04 36	PFC-13 RET	
J08 13	PFC-13	FUEL DUMP (PYROS 1+2
J18 18	PFC-13	
J22 19	PFC-13	
P04 35	PFC-13	MANUAL FUEL DUMP NO1
A08J24B Q	PFC-13	OUTPUT
MBI E 5	PFC-13	OUTPUT
J11 14	PFC-14-T	FUEL DUMP (PYRO 3)
A08J24B N	PFC-14-T	OUTPUT
J06 24	PFC-14-1 RET	
J06 23	PFC-14-1	FUEL DUMP PYRO 3
J22 3	PFC-14-1	
J18 31	PFC-14 RET	
P04 38	PFC-14 RET	
J08 14	PFC-14	FUEL DUMP (PYRO 3)
J18 30	PFC-14	
J22 2	PFC-14	
P04 37	PFC-14	MANUAL FUEL DUMP NO2
A08J24B M	PFC-14	OUTPUT
MBI E 4	PFC-14	OUTPUT
J11 15	PFC-15-T	CANARD DEPLOY
A08J23B P	PFC-15-T	OUTPUT

J05 26	PFC-15-1 RET	
J05 25	PFC-15-1	CANARD DEPLOY
J21 26	PFC-15-1	
J19 27	PFC-15 RET	
P04 6	PFC-15 RET	
J08 15	PFC-15	CANARD DEPLOY
J19 26	PFC-15	
J21 25	PFC-15	
P04 5	PFC-15	MANUAL CANARD DEPLOY
A08J23B 0	PFC-15	OUTPUT
MB1 E32	PFC-15	OUTPUT
J11 16	PFC-16-T	TOWER LEG NUTS (PYRO
A07J24A T	PFC-16-T	OUTPUT
J12 2	PFC-16-1 RET	
J12 1	PFC-16-1	TOWER LEG NUTS PYRO
J20 28	PFC-16-1	
J12 4	PFC-16-2 RET	
J12 3	PFC-16-2	TOWER LEG NUTS PYRO
J20 30	PFC-16-2	
J18 15	PFC-16 RET	
J08 16	PFC-16	TOWER LEG NUTS (PYRO
J18 14	PFC-16	
J20 29	PFC-16	
A07J24A S	PFC-16	OUTPUT
MB1 E14	PFC-16	OUTPUT
J11 17	PFC-17-T	TOWER LEG NUTS (PYRO
A07J24A V	PFC-17-T	OUTPUT
J12 6	PFC-17-1 RET	
J12 5	PFC-17-1	TOWER LEG NUTS PYRO
J20 32	PFC-17-1	
J12 8	PFC-17-2 RET	
J12 7	PFC-17-2	TOWER LEG NUTS PYRO
J20 34	PFC-17-2	
J18 29	PFC-17 RET	
J08 17	PFC-17	TOWER LEG NUTS (PYRO
J18 28	PFC-17	
J20 33	PFC-17	
A07J24A U	PFC-17	OUTPUT
MB1 E15	PFC-17	OUTPUT
J11 18	PFC-18-T	ET JETTISON MOTOR
A08J23B R	PFC-18-T	OUTPUT
J05 28	PFC-18-1 RET	
J05 27	PFC-18-1	ET JETTISON MOTOR
J21 30	PFC-18-1	
J19 23	PFC-18 RET	
P04 4	PFC-18 RET	
J08 18	PFC-18	ET JETTISON MTTOR
J19 22	PFC-18	
J21 29	PFC-18	
P04 3	PFC-18	MANUAL ET JETTISON M
A08J23B Q	PFC-18	OUTPUT
MB1 E31	PFC-18	OUTPUT
J11 19	PFC-19-T	APEX COVER JETTISON
A07J23A N	PFC-19-T	OUTPUT
J12 10	PFC-19-1 RET	
J12 9	PFC-19-1	APEX COVER JETTISON
J20 36	PFC-19-1	
J12 12	PFC-19-2 RET	
J12 11	PFC-19-2	APEX COVER JETTISON
J20 8	PFC-19-2	
J19 25	PFC-19 RET	

	P04 12	PFC-19 RET	
	J08 19	PFC-19	APEX COVER JETTISON
	J19 24	PFC-19	
	J20 19	PFC-19	
	P04 11	PFC-19	MANUAL APEX COVER JE
A07	J23A M	PFC-19	OUTPUT
MB1	E41	PFC-19	OUTPUT
	J11 1	PFC-1-T	LM-SLA SEP (PYROS 1+
A06	J23 T	PFC-1-T	OUTPUT
	J05 2	PFC-1-1 RET	
	J05 1	PFC-1-1	LM-SLA SEP PY RO 1
	J21 38	PFC-1-1	
	J05 4	PFC-1-2 RET	
	J05 3	PFC-1-2	LM-SLA SEP PYRO 2
	J21 40	PFC-1-2	
	J19 11	PFC-1 RET	
	P04 44	PFC-1 RET	
	J08 1	PFC-1	LM-SLA SEP (PYROS 1+
	J19 10	PFC-1	
	J21 39	PFC-1	
	P04 43	PFC-1	MANUAL LM-SLA SEP NO
A06	J23 S	PFC-1	OUTPUT
MB1	E47	PFC-1	OUTPUT
	J11 20	PFC-20-T	DROGUE CHUTE DEPLOY
A07	J23A P	PFC-20-T	OUTPUT
	J12 14	PFC-20-1 RET	
	J12 13	PFC-20-1	DROGUE CHUTE DEPLOY
	J20 10	PFC-20-1	
	J12 16	PFC-20-2 RET	
	J12 15	PFC-20-2	
	J20 12	PFC-20-2	
	J19 15	PFC-20 RET	
	P04 14	PFC-20 RET	
	J08 20	PFC-20	DROGUE CHUTE DEPLOY
	J19 14	PFC-20	
	J20 11	PFC-20	
	P04 13	PFC-20	MANUAL DROGUE CHUTE
A07	J23A O	PFC-20	OUTPUT
MB1	E40	PFC-20	OUTPUT
	J11 21	PFC-21-T	CM RCS PURGE (PYROS
A08	J24B V	PFC-21-T	OUTPUT
	J06 26	PFC-21-1 RET	
	J06 25	PFC-21-1	CM RCS PURGE PYRO 1
	J22 10	PFC-21-1	
	J06 28	PFC-21-2 RET	
	J06 27	PFC-21-2	CM RCS PURGE PYRO 2
	J22 12	PFC-21-2	
	J18 23	PFC-21 RET	
	P04 40	PFC-21 RET	
	P04 24	PFC-21 RET	
	J08 21	PFC-21	CM RCS PURGE (PYROS
	J18 22	PFC-21	
	J22 11	PFC-21	
	P04 39	PFC-21	MANUAL CM RCS PURGE
	P04 23	PFC-21	MANUAL CM RCS PURGE
A08	J24B U	PFC-21	OUTPUT
MB1	E 7	PFC-21	OUTPUT
	J11 22	PFC-22-T	CM RCS PURGE (PYROS
A08	J24B T	PFC-22-T	OUTPUT
	J06 30	PFC-22-1 RET	
	J06 29	PFC-22-1	CM RCS PURGE PYRO 3

	J22 14	PFC-22-1	
	J06 32	PFC-22-2 RET	
	J06 31	PFC-22-2	CM RCS PURGE PYRO 4
	J22 16	PFC-22-2	
	J18 21	PFC-22 RET	
	P04 26	PFC-22 RET	
	P04 42	PFC-22 RET	
	J08 22	PFC-22	CM RCS PURGE (PYROS
	J18 20	PFC-22	
	J22 15	PFC-22	
	P04 25	PFC-22	MANUAL CM RCS PURGE
	P04 41	PFC-22	MANUAL CM RCS PURGE
A08	J24B S	PFC-22	OUTPUT
MB1	E 6	PFC-22	OUTPUT
	J11 23	PFC-23-T	DISCONNECT DROGUE CH
A07	J23A R	PFC-23-T	OUTPUT
	J12 18	PFC-23-1 RET	
	J12 17	PFC-23-1	DISCONNECT DROGUE CH
	J20 14	PFC-23-1	
	J12 20	PFC-23-2 RET	
	J12 19	PFC-23-2	DISCONNECT DROGUE CH
	J20 16	PFC-23-2	
	J19 21	PFC-23 RET	
	P04 16	PFC-23 RET	
	J08 23	PFC-23	DISCONNECT DROGUE CH
	J19 20	PFC-23	
	J20 15	PFC-23	
	P04 15	PFC-23	MANUAL DROGUE CHUTE
A07	J23A Q	PFC-23	OUTPUT
MB1	E39	PFC-23	OUTPUT
	J11 24	PFC-24-T	DEPLOY PILOT CHUTE(P
A06	J24 N	PFC-24-T	OUTPUT
	J05 14	PFC-24-1 RET	
	J05 13	PFC-24-1	DEPLOY PILOT CHUTE P
	J21 6	PFC-24-1	
	J05 16	PFC-24-2 RET	
	J05 15	PFC-24-2	DEPLOY PILOT CHUTE P
	J21 17	PFC-24-2	
	J18 7	PFC-24 RET	
	P04 18	PFC-24 RET	
	J08 24	PFC-24	DEPLOY PILOT CHUTE(P
	J18 1	PFC-24	
	J21 5	PFC-24	
	P04 17	PFC-24	MANUAL DEPLOY PILOT
A06	J24 M	PFC-24	OUTPUT
MB1	E19	PFC-24	OUTPUT
	J11 25	PFC-25-T	DEPLOY PILOT CHUTE(P
A06	J24 R	PFC-25-T	OUTPUT
	J05 18	PFC-25-1 RET	
	J05 17	PFC-25-1	DEPLOY PILOT CHUTE P
	J21 34	PFC-25-1	
	J18 27	PFC-25 RET	
	P04 20	PFC-25 RET	
	J08 25	PFC-25	DEPLOY PILOT CHUTE(P
	J18 26	PFC-25	
	J21 33	PFC-25	
	P04 19	PFC-25	MANUAL DEPLOY PILOT
A06	J24 Q	PFC-25	OUTPUT
MB1	E21	PFC-25	OUTPUT
	J11 26	PFC-26-T	CSM-SLA SEP
	J05 20	PFC-26-1 RET	

	J05 19	PFC-26-1	CXM-SLA SEP
	J21 8	PFC-26-1	
	J19 7	PFC-26 RET	
	P04 8	PFC-26 RET	
	J08 26	PFC-26	CSM-SLA SEP
	J19 1	PFC-26	
	J21 19	PFC-26	
	P04 7	PFC-26	MANUAL CSM-SLA SEP
MB1	E50	PFC-26	OUTPUT
	J11 27	PFC-27-T	LM DOCKING RING SEP
A06	J23 R	PFC-27-T	OUTPUT
	J12 30	PFC-27-1 RET	
	J12 29	PFC-27-1	LM DOCKING RING SEP
	J20 18	PFC-27-1	
	J19 33	PFC-27 RET	
	P04 22	PFC-27 RET	
	J08 27	PFC-27	LM DOCKING RING SEP
	J19 32	PFC-27	
	J20 17	PFC-27	
	P04 21	PFC-27	MANUAL LM DOCKING RI
A06	J23 Q	PFC-27	OUTPUT
MB1	E48	PFC-27	OUTPUT
	J11 28	PFC-28-T	APEX COVER DROGUE CH
A06	J24 P	PFC-28-T	OUTPUT
	J12 32	PFC-28 RET	
	J12 31	PFC-28	ENABLE LANYARD SW
A06	J24 0	PFC-28	
MB1	E20	PFC-28	OUTPUT
	J11 2	PFC-2-T	LM-SLA SEP (PYROS 3+
A06	J23 V	PFC-2-T	OUTPUT
	J05 6	PFC-2-1 RET	
	J05 5	PFC-2-1	LM-SLA SEP PYRO 3
	J21 43	PFC-2-1	
	J05 8	PFC-2-2 RET	
	J05 7	PFC-2-2	LM-SLA SEP PYRO 4
	J21 45	PFC-2-2	
	J19 31	PFC-2 RET	
	P04 46	PFC-2 RET	
	J08 2	PFC-2	LM-SLA SEP (PYROS 3+
	J19 30	PFC-2	
	J21 44	PFC-2	
	P04 45	PFC-2	MANUAL LM-SLA SEP NO
A06	J23 U	PFC-2	OUTPUT
MB1	E46	PFC-2	OUTPUT
	J11 3	PFC-3-T	CUT LM-LV UMBILICAL
A06	J23 P	PFC-3-T	OUTPUT
	J05 10	PFC-3-1 RET	
	J05 9	PFC-3-1	CUT LM-LV UMB PYRO 1
	J21 48	PFC-3-1	
	J05 12	PFC-3-2 RET	
	J05 11	PFC-3-2	CUT LM-LV UMB PYRO 2
	J21 50	PFC-3-2	
	J19 9	PFC-3 RET	
	J08 3	PFC-3	CUT LM-LV UMBILICAL
	J19 8	PFC-3	
	J21 49	PFC-3	
A06	J23 0	PFC-3	OUTPUT
MB1	E49	PFC-3	OUTPUT
	J11 4	PFC-4-T	CM-SM DEADFACE (PYRO
A06	J24 T	PFC-4-T	OUTPUT
	J12 22	PFC-4-1 RET	

	J17 21	PFC-4-1	CM-SM DEADFACE PYRO
	J20 20	PFC-4-1	
	J12 24	PFC-4-2 RET	
	J12 23	PFC-4-2	CM-SM DEADFACE PYRO
	J20 22	PFC-4-2	
	J18 11	PFC-4 RET	
	J08 4	PFC-4	CM-SM DEADFACE (PYRO
	J18 10	PFC-4	
	J20 21	PFC-4	
A06	J24 S	PFC-4	OUTPUT
MB1	E22	PFC-4	OUTPUT
	J11 5	PFC-5-T	CM-SM DEADFACE (PYRO
A06	J24 V	PFC-5-T	OUTPUT
	J12 26	PFC-5-1 RET	
	J12 25	PFC-5-1	CM-SM DEADFACE PYRO
	J20 24	PFC-5-1	
	J12 28	PFC-5-2 RET	
	J12 27	PFC-5-2	CM-SM DEADFACE PYRO
	J20 26	PFC-5-2	
	J18 17	PFC-5 RET	
	J08 5	PFC-5	CM-SM DEADFACE (PYRO
	J20 25	PFC-5	
A06	J24 U	PFC-5	OUTPUT
MB1	E23	PFC-5	OUTPUT
	J11 6	PFC-6-T	OXIDIZER DUMP (PYROS
A07	J24A N	PFC-6-T	OUTPUT
	J06 2	PFC-6-1 RET	
	J06 1	PFC-6-1	OXIDIZER DUMP PYRO 1
	J22 20	PFC-6-1	
	J06 4	PFC-6-2 RET	
	J06 3	PFC-6-2	OXIDIZER DUMP PYRO 2
	J22 22	PFC-6-2	
	J18 9	PFC-6 RET	
	P04 32	PFC-6 RET	
	J08 6	PFC-6	OXIDIZER DUMP (PYROS
	J18 8	PFC-6	
	J22 21	PFC-6	
	P04 31	PFC-6	MANUAL OXIDIZER DUMP
A07	J24A M	PFC-6	OUTPUT
MB1	E11	PFC-6	OUTPUT
	J11 7	PFC-7-T	OXIDIZER DUMP (PYRO
A07	J24A R	PFC-7-T	OUTPUT
	J06 6	PFC-7-1 RET	
	J06 5	PFC-7-1	OXIDIZER DUMP PYRO 3
	J22 18	PFC-7-1	
	J18 13	PFC-7 RET	
	P04 34	PFC-7 RET	
	J08 7	PFC-7	OXIDIZER DUMP (PYRO
	J18 12	PFC-7	
	J22 17	PFC-7	
	P04 33	PFC-7	MANUAL OXIDIZER DUMP
A07	J24A Q	PFC-7	OUTPUT
MB1	E13	PFC-7	OUTPUT
	J11 8	PFC-8-T	CM RCS PRESSURIZATIO
A08	J23B T	PFC-8-T	OUTPUT
	J06 8	PFC-8-1 RET	
	J06 7	PFC-8-1	CM RCS PRESSURIZATIO
	J22 24	PFC-8-1	
	J06 10	PFC-8-2 RET	
	J06 9	PFC-8-2	CM RCS PRESSURIZATIO
	J22 26	PFC-8-2	

J19 19	PFC-8 RET	
P04 10	PFC-8 RET	
J08 8	PFC-8	CM RCS PRESSURIZATIO
J19 18	PFC-8	
J22 25	PFC-8	
P04 9	PFC-8	MANUAL CM RCS PRESSU
A08J23B S	PFC-8	OUTPUT
MB1 E30	PFC-8	OUTPUT
J11 9	PFC-9-T	CM-SM SEP (PYROS 1+2
A07J23A T	PFC-9-T	OUTPUT
J06 12	PFC-9-1 RET	
J06 11	PFC-9-1	CM-SM SEP PYRO 1
J22 28	PFC-9-1	
J06 14	PFC-9-2 RET	
J06 13	PFC-9-2	CM-SM SEP PYRO 2
J22 30	PFC-9-2	
J19 17	PFC-9 RET	
P04 28	PFC-9 RET	
J08 9	PFC-9	CM-SM SEP (PYROS 1+2
J19 16	PFC-9	
J22 29	PFC-9	
P04 27	PFC-9	MANUAL CM-SM SEP NO1
A07J23A S	PFC-9	OUTPUT
MB1 E38	PFC-9	OUTPUT
A06J23 N	PFC 26-T	OUTPUT
A06J23 M	PFC 26	OUTPUT
P64 22	PPCC-1 MAST PWR	A6J23 B
A06J23 B	PPCC-1 MAST PWR	MB TRACE
A06J23 D	PPCC-1 MAST PWR	MB TRACE
P64 34	PPCC-1 SLAVE PWR	A6J23 E55
A06J23 A	PPCC-1 SLAVE PWR	MB TRACE
A06J23 C	PPCC-1 SLAVE PWR	MB TRACE
MB1 E55	PPCC-1 SLAVE PWR	OUTPUT
P64 35	PPCC-2 MAST PWR	A7J24A B
A07J24A B	PPCC-2 MAST PWR	MB TRACE
A07J24A H	PPCC-2 MAST PWR	MB TRACE
A08J23B F	PPCC-2 MAST PWR	MB TRACE
A08J23B B	PPCC-2 MAST PWR	MB TRACE
A08J23B D	PPCC-2 MAST PWR	MB TRACE
A08J24B J	PPCC-2 MAST PWR	MB TRACE
A08J24B F	PPCC-2 MAST PWR	MB TRACE
P64 36	PPCC-2 SLAVE PWR	A7J24A E8
A07J24A G	PPCC-2 SLAVE PWR	MB TRACE
A07J24A A	PPCC-2 SLAVE PWR	MB TRACE
A08J23B C	PPCC-2 SLAVE PWR	MB TRACE
A08J23B A	PPCC-2 SLAVE PWR	MB TRACE
A08J23B E	PPCC-2 SLAVE PWR	MB TRACE
A08J24B I	PPCC-2 SLAVE PWR	MB TRACE
A08J24B E	PPCC-2 SLAVE PWR	MB TRACE
MB1 E 8	PPCC-2 SLAVE PWR	OUTPUT
MB1 E 2	PPCC-2 SLAVE PWR	OUTPUT
MB1 E36	PPCC-2 SLAVE PWR	OUTPUT
P54 37	PPCC-3 MAST PWR	A7J24A D
A06J23 F	PPCC-3 MAST PWR	
A07J24A F	PPCC-3 MAST PWR	MB TRACE
A07J24A J	PPCC-3 MAST PWR	MB TRACE
A07J24A D	PPCC-3 MAST PWR	MB TRACE
A08J24B B	PPCC-3 MAST PWR	MB TRACE
A08J24B H	PPCC-3 MAST PWR	MB TRACE
P64 38	PPCC-3 SLAVE PWR	A7J24A E9
A06J23 E	PPCC-3 SLAVE PWR	

A07J24A I	PPCC-3 SLAVE PWR	MB TRACE
A07J24A E	PPCC-3 SLAVE PWR	MB TRACE
A07J24A C	PPCC-3 SLAVE PWR	MB TRACE
A08J24B A	PPCC-3 SLAVE PWR	MB TRACE
A08J24B G	PPCC-3 SLAVE PWR	MB TRACE
MB1 F 9	PPCC-3 SLAVE PWR	OUTPUT
MB1 E54	PPCC-3 SLAVE PWR	OUTPUT
MB1 E 1	PPCC-3 SLAVE PWR	OUTPUT
P64 45	PPCC-4 MAST PWR	A8J23 H
P64 39	PPCC-4 MAST PWR	A6J24 J
A06J24 J	PPCC-4 MAST PWR	
A08J23B H	PPCC-4 MAST PWR	
P64 46	PPCC-4 SLAVE PWR	A8J23 F35
P64 40	PPCC-4 SLAVE PWR	A6J24 E17
A06J24 I	PPCC-4 SLAVE PWR	
A08J23B G	PPCC-4 SLAVE PWR	
MB1 E35	PPCC-4 SLAVE PWR	OUTPUT
MB1 E17	PPCC-4 SLAVE PWR	
P64 41	PPCC-5 MAST PWR	A7J23A B
A07J23A F	PPCC-5 MAST PWR	MB TRACE
A07J23A B	PPCC-5 MAST PWR	MB TRACE
A07J23A D	PPCC-5 MAST PWR	MB TRACE
P64 42	PPCC-5 SLAVE PWR	A7J23A E45
A07J23A A	PPCC-5 SLAVE PWR	MB TRACE
A07J23A E	PPCC-5 SLAVE PWR	MB TRACE
A07J23A C	PPCC-5 SLAVE PWR	MB TRACE
MB1 E45	PPCC-5 SLAVE PWR	OUTPUT
P64 43	PPCC-6 MAST PWR	A6J24 B
A06J24 F	PPCC-6 MAST PWR	MB TRACE
A06J24 H	PPCC-6 MAST PWR	MB TRACE
A06J24 B	PPCC-6 MAST PWR	MB TRACE
A06J24 D	PPCC-6 MAST PWR	MB TRACE
P64 44	PPCC-6 SLAVE PWR	A6J24 E16
A06J24 A	PPCC-6 SLAVE PWR	MB TRACE
A06J24 E	PPCC-6 SLAVE PWR	MB TRACE
A06J24 C	PPCC-6 SLAVE PWR	MB TRACE
A06J24 G	PPCC-6 SLAVE PWR	MB TRACE
MB1 E16	PPCC-6 SLAVE PWR	
A09J25 D	PWR UP RESET A1	
A09J26 C	PWR UP RESET A1	INPUT
A09J25 C	PWR UP RESET A2	MB TRACE
A10J27 D	PWR UP RESET A2	MB TRACE
A10J27 C	PWR UP RESET A3	MB TRACE
A11J27 D	PWR UP RESET A3	MB TRACE
A11J27 C	PWR UP RESET A4	MB TRACE
A12J27 D	PWR UP RESET A4	MB TRACE
A12J27 C	PWR UP RESET A5	OUTPUT
A09J25 F	PWR UP RESET B1	
A09J26 E	PWR UP RESET B1	INPUT
A09J25 E	PWR UP RESET B2	MB TRACE
A10J27 F	PWR UP RESET B2	MB TRACE
A10J27 E	PWR UP RESET B3	MB TRACE
A11J27 F	PWR UP RESET B3	MB TRACE
A11J27 E	PWR UP RESET B4	MB TRACE
A12J27 F	PWR UP RESET B4	MB TRACE
A12J27 E	PWR UP RESET B5	OUTPUT
A12J30 J	RESET ELB 1A IND	
A12J30 F	RESET ELB 1A	
A12J30 L	RESET ELB 1B IND	
A12J30 E	RESET ELB 1B	
A12J30 I	RESET ELB 2A IND	

A12J30 G	RESET FLR 2A	
A12J30 K	RESET FLR 2B TND	
A12J30 H	RESET FLR 2B	
J11 32	RESET FV TM-T	
A09J25 2K	RESET FV TM-T	OUTPUT
J07 4	RESET FV TM RET	GND 4
J07 3	RESET FV TM	FROM IOOMA SW 1
A09J25 2H	RESET FV TM	OUTPUT
A11J29 2L	RESET 1	28V
A12J30 2M	RESET 1	
A10J28 2L	RESET 2	MB TRACE
A11J29 2M	RESET 2	MB TRACE
A08J24B2N	RESET 3	MB TRACE
A10J28 2M	RESET 3	INPUT
A07J24A2N	RESET 4	MB TRACE
A08J24B20	RESET 4	MB TRACE
A06J24 2N	RESET 5	MB TRACE
A07J24A20	RESET 5	MB TRACE
A06J23 2N	RESET 6	MB TRACE
A06J24 20	RESET 6	MB TRACE
A06J23 20	RESET 7	MB TRACE
A07J23A2N	RESET 7	MB TRACE
A07J23A20	RESET 8	MB TRACE
A08J23B2N	RESET 8	MB TRACE OUTPUT
A08J23B20	RESET 9	MB TRACE
P62 46	SM+X JETS 1-1	M INPUT
P62 47	SM+X JETS 2-1	M INPUT
J11 41	SM X JETS 1-T	
A10J28 J	SM X JETS 1-T	
A10J28 I	SM X JETS 1-1	
J07 24	SM X JETS 1 RET	GND 4
J07 28	SM X JETS 1 RET	GND 4
P64 31	SM X JETS 1 RET	
P64 29	SM X JETS 1 RET	
J07 27	SM X JETS 1	TO G+N(SPS ABORT ACC
J07 23	SM X JETS 1	FROM SD 3
P64 15	SM X JETS 1	TO G AND N
P64 13	SM X JETS 1	SD 3 PUTPUT
J11 42	SM X JETS 2-T	
A10J28 L	SM X JETS 2-T	
A10J28 K	SM X JETS 2-1	
J07 30	SM X JETS 2 RET	GND 4
J07 26	SM X JETS 2 RET	GND 4
P64 32	SM X JETS 2 RET	
P64 30	SM X JETS 2 RET	
J07 25	SM X JETS 2	FROM SD 4
J07 29	SM X JETS 2	TO SCS(INHIBIT P+Y S
P64 16	SM X JETS 2	TO SCS
P64 14	SM X JETS 2	SD 4 OUTPUT
J11 60	TEL RET 1	LOGIC BUS RETURN
A09J25 2E	TEL RET 1	
A10J28 U	TEL RET 1	
J11 61	TEL RET 2	PYRO BUS RETURN
A06J23 2L	TEL RET 2	MB TRACE
A06J24 2L	TEL RET 2	MB TRACE
A07J23A2L	TEL RET 2	MB TRACE
A07J24A2L	TEL RET 2	MB TRACE
A08J23B2L	TEL RET 2	MB TRACE
A08J24B2L	TEL RET 2	MB TRACE
MB1 E27	TEL RET 2	MB TRACE
MB1 E26	TEL RET 2	MB TRACE

P63	26	TEST SW OFF	A15J35-32
P63	25	TEST SW ON	A15J35-38
A09J26	M	TM RET 1	
P63	21	TRNS CNT RTO CCW	A15J35-39
A11J29	F	T 42SEC A	OUTPUT
A11J29	E	T 42SEC B	OUTPUT
J07	39	T 42 SEC A	TEST TOOL ONLY
J07	40	T 42 SEC B	TEST TOOL ONLY
P63	20	Z-SPARE 1	
P63	28	Z-SPARE 2	
P63	29	Z-SPARE 3	
P63	30	Z-SPARE 4	
P63	19	11K BARO SW CLOS	A15J35-4
P63	18	24K BARO SW CLOS	A15J35-9
A09J26	F	+26VC	MB TRACE
A09J26	D	+26VC	MB TRACE
J18	16	P -5	
J12	37		SPARE PIN

L+1

Mother Board 2 Wiring List

(CTL & IC Boards)

A15J35	60	AB		
A17J37	12	AB		
A15J35	57	AC		
A17J37	14	AC		
A14J33	20	ADDRESS 0A		
A14J34	29	ADDRESS 0B		
A14J33	10	ADDRESS 00A		
A14J34	19	ADDRESS 00B		
A14J33	21	ADDRESS 1A		
A14J34	30	ADDRESS 1B		
A14J33	11	ADDRESS 10A		
A14J34	20	ADDRESS 10B		
A14J33	22	ADDRESS 2A		
A14J34	31	ADDRESS 2B		
A14J33	12	ADDRESS 20A		
A14J34	21	ADDRESS 20B		
A14J33	23	ADDRESS 3A		
A14J34	32	ADDRESS 3B		
A14J33	13	ADDRESS 30A		
A14J34	22	ADDRESS 30B		
A14J33	24	ADDRESS 4A		
A14J34	33	ADDRESS 4B		
A14J33	14	ADDRESS 40A		
A14J34	23	ADDRESS 40B		
A14J33	25	ADDRESS 5A		
A14J34	34	ADDRESS 5B		
A14J33	15	ADDRESS 50A		
A14J34	24	ADDRESS 50B		
A14J33	26	ADDRESS 6A		
A14J34	35	ADDRESS 6B		
A14J33	16	ADDRESS 60A		
A14J34	25	ADDRESS 60B		
A14J33	27	ADDRESS 7A		
A14J34	36	ADDRESS 7B		
A14J33	17	ADDRESS 70A		
A14J34	26	ADDRESS 70B		
A20J42	51	ADD ADV AMP A		
A23J51	47	ADD ADV AMP A	1	GEN 10
A20J42	50	ADD ADV AMP B		
A23J51	50	ADD ADV AMP B	1	GEN 10
A20J42	48	ADD ADV AMP C		
A23J51	53	ADD ADV AMP C	1	GEN 10
A15J35	55	AD		
A17J37	13	AD		
A17J37	15	AE		
A19J40	29	AE		
A17J37	18	AF		
A19J40	31	AF		
A15J35	42	AG		
A17J37	20	AG		
A17J37	16	AH		
A19J40	33	AH		
A15J35	49	AI		
A17J37	21	AI		
A17J37	19	AJ		
A19J40	35	AJ		
A15J35	46	AK		
A17J37	23	AK		

A22J49	38	ALL FAULTS(L)		GEN 30
P10	54	ALL FAULTS (L)		
A17J37	24	AL		
A19J40	47	AL		
A15J35	58	AM		
A17J37	22	AM		
A17J37	31	AN		
A19J40	37	AN		
A15J35	54	AO		
A17J37	26	AO		
A15J35	51	AP		
A17J37	27	AP		
A17J37	25	AQ		
A19J40	49	AQ		
A23J51	43	ARA CLOCK(L)	4	
A23J52	79	ARA CLOCK(L)	4	
A24J53	82	ARA CLOCK(L)	2	GEN 10
A23J51	45	ARA 9	1	
A23J52	2	ARA 9	5	GEN 10
A23J51	49	ARB CLOCK(L)	4	
A23J52	5	ARB CLOCK(L)	4	
A24J53	83	ARB CLOCK(L)	2	GEN 10
A23J51	46	ARB 9	1	
A23J52	11	ARB 9	3	GEN 10
A23J51	18	ARC CLOCK(L)	6	
A24J53	64	ARC CLOCK(L)	2	GEN 10
A23J51	12	ARC 0	2	GEN 10
A23J52	14	ARC 0	2	
A21J47	50	ARMV FAULT(L)	1	
A23J52	77	ARMV FAULT(L)	1	GEN 10
A21J47	51	ARMV FAULT (L)*	1	
A23J51	39	ARMV FAULT (L)*		GEN 10
A13J60	35	ARO*		
A23J52	29	ARO*	1	GEN 10
A13J60	34	ARO		
A23J51	23	ARO	1	GEN 10
A13J60	18	AR1*		
A23J52	26	AR1*	1	GEN 10
A13J60	1	AR1		
A23J51	27	AR1	1	GEN 10
A13J60	19	AR2*		
A23J52	53	AR2*	1	GEN 10
A13J60	2	AR2		
A23J51	32	AR2	1	GEN 10
A13J60	20	AR3*		
A23J52	50	AR3*	1	GEN 10
A13J60	3	AR3		
A23J51	31	AR3	1	GEN 10
A13J60	21	AR4*		
A23J52	35	AR4*	1	GEN 10
A13J60	4	AR4		
A23J51	25	AR4	1	GEN 10
A13J60	22	AR5*		
A23J52	38	AR5*	1	GEN 10
A13J60	5	AR5		
A23J51	26	AR5	1	GEN 10
A13J60	23	AR6*		
A23J52	62	AR6*	1	GEN 10
A13J60	6	AR6		
A23J51	35	AR6	1	GEN 10
A13J60	24	AR7*		

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A23J52 59   AR7*                  1                    GEN 10
A13J60  7   AR7
A23J51 34   AR7                   1                    GEN 10
A13J60 25   AR8*
A23J52 71   AR8*                  1                    GEN 10
A13J60  8   AR8
A23J51 38   AR8                   1                    GEN 10
A13J60 26   AR9*
A23J52 74   AR9*                  1                    GEN 10
A13J60  9   AR9
A23J51 40   AR9                   1                    GEN 10
A17J37 29   AR
A19J40 39   AR
   P01 13   AUTO ABT ENABLE
A15J35 17   AUTO ABT ENABLE
A16J35 17   AUTO ABT ENABLE
A19J40 14   AUTO ABT ENABLE
A15J35 16   AUTO ABT ENA RET
A16J35 16   AUTO ABT ENA RET
A21J47 56   A EVEN                1
A22J49 80   A EVEN                3
A16J35 60   BB
A18J37 12   BB
A16J35 57   BC
A18J37 14   BC
A16J35 55   BD
A18J37 13   BD
A18J37 15   BE
A19J40 28   BE
A18J37 18   BF
A19J40 30   BF
A16J35 42   BG
A18J37 20   BG
A18J37 16   BH
A19J40 32   BH
A16J35 49   BI
A18J37 21   BI
A18J37 19   BJ
A19J40 34   BJ
A16J35 46   BK
A18J37 23   BK
A18J37 24   BL
A19J40 46   BL
A16J35 58   BM
A18J37 22   BM
A18J37 31   BN
A19J40 36   BN
A16J35 54   BO
A18J37 26   BO
A16J35 51   BP
A18J37 27   BP
A18J37 25   BQ
A19J40 48   BQ
A23J51 16   BRANCH ADD A(F)       1
A23J52 73   BRANCH ADD A(F)       5
MB2 C36-Z   BRANCH ADD A(F)
A17J38 41   BRANCH ADD A
MB2 R36-X   BRANCH ADD A
A23J52 42   BRANCH ADD B(F)
MB2 C35-Z   BRANCH ADD B(F)
A17J38 40   BRANCH ADD B
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MB2 R35-X	BRANCH ADD B			
A17J38 51	BRANCH ADD 2A			
A18J38 41	BRANCH ADD 2A			
A17J38 48	BRANCH ADD 2B			
A18J38 40	BRANCH ADD 2B			
A21J47 53	BRANCH FAULT(L)	1		
A23J52 45	BRANCH FAULT(L)		GEN 10	
A22J49 57	BRANCH INT(L)A	1		
A24J54 64	BRANCH INT(L)A		GEN	LOW POWER
A23J51 72	BRANCH INT(L)B	1		
A24J54 62	BRANCH INT(L)B		GEN	LOW POWER
A18J37 29	BR			
A19J40 38	BR			
A21J47 67	CAUTION LIGHT		GEN XISTOR	
A13J59 50	CLAMP FAULT			
A21J47 45	CLAMP FAULT			
A13J59 19	CLAMP			
A23J52 82	CLEAR ARA	1		
A24J53 84	CLEAR ARA	1	GEN 10	
A23J52 9	CLEAR ARB	1		
A24J53 74	CLEAR ARB	1	GEN 10	
A23J51 19	CLEAR ARC	1		
A24J53 73	CLEAR ARC	1	GEN 10	
A17J37 10	CLEAR BAR 1A			
A17J38 8	CLEAR BAR 1A			
A17J38 5	CLEAR BAR 1B			
A18J37 10	CLEAR BAR 1B			
A14J34 55	CLEAR BAR 2A RET			
A15J36 4	CLEAR BAR 2A RET			
A15J36 46	CLEAR BAR 2A			
A18J38 8	CLEAR BAR 2A			
A14J34 56	CLEAR BAR 2B RET			
A16J39 4	CLEAR BAR 2B RET			
A16J39 46	CLEAR BAR 2B			
A18J38 5	CLEAR BAR 2B			
A17J37 39	CLEAR ELB 1A			
A24J54 29	CLEAR ELB 1A		GEN 10	
A18J37 39	CLEAR ELB 1B			
A24J54 45	CLEAR ELB 1B		GEN 10	
A14J34 53	CLEAR ELB 2A			
A24J54 27	CLEAR ELB 2A		GEN 10	
A14J34 54	CLEAR ELB 2B			
A24J54 33	CLEAR ELB 2B		GEN 10	
A22J49 6	CLEAR MRA	1		
A24J53 44	CLEAR MRA	1	GEN 10	
A22J49 23	CLEAR MRB	1		
A24J53 45	CLEAR MRB	1	GEN 10	
J09 1	CLEAR SYSTEM D			
J09 10	CLEAR SYSTEM (V)			
A14J34 46	CLEAR SYSTEM (V)			
A19J41 6	CLEAR TIMER A			
A24J54 14	CLEAR TIMER A		GEN 10	
A20J41 6	CLEAR TIMER B			
A24J54 50	CLEAR TIMER B		GEN 10	
P10 42	CMD CLEAR AR(L)		TEST TOOL	
A24J53 68	CMD CLEAR AR(L)	2		
P10 1	CMD CLEAR MR(L)			
A24J53 75	CMD CLEAR MR(L)	4		
J09 3	CMD EXECUTE A			
A14J33 19	CMD EXECUTE A			
A21J47 34	CMD EXECUTE A		GEN 10	

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   J09  4  CMD EXECUTE B
A14J34 45  CMD EXECUTE B
A21J47 77  CMD EXECUTE B
   P10  2  CMD READ(L)
A24J53  4  CMD READ(L)        3
   P10  3  CMD RECYCLE(L)
A24J53 14  CMD RECYCLE(L)     2
   P01 23  CMSM SEP INIT
A15J35 50  CMSM SEP INIT
A16J35 50  CMSM SEP INIT
A15J35 47  CMSM SEP INI RET
A16J35 47  CMSM SEP INI RET
A20J42 34  CTA 0
A23J52  4  CTA 0              1
A20J42 37  CTA 1
A23J52 10  CTA 1              1
A20J42 41  CTA 2
A23J52 16  CTA 2              1
A20J42 44  CTA 3
A23J52 22  CTA 3              1
A20J42  5  CTA 4
A23J52 28  CTA 4              1
A20J42  8  CTA 5
A23J52 34  CTA 5              1
A20J42 11  CTA 6
A23J52 40  CTA 6              1
A20J42 14  CTA 7
A23J52 46  CTA 7              1
A20J42 17  CTA 8
A23J52 52  CTA 8              1
A20J42 20  CTA 9
A23J52 58  CTA 9              1
A23J52  7  CTBF 1              1
A20J42  4  CTB 0
A23J52  1  CTB 0              1
A20J42  7  CTB 1
A20J42 10  CTB 2
A23J52 13  CTB 2              1
A20J42 13  CTB 3
A23J52 19  CTB 3              1
A20J42 16  CTB 4
A23J52 25  CTB 4              1
A20J42 19  CTB 5
A23J52 31  CTB 5              1
A20J42 22  CTB 6
A23J52 37  CTB 6              1
A20J42 25  CTB 7
A23J52 43  CTB 7              1
A20J42 28  CTB 8
A23J52 49  CTB 8              1
A20J42 31  CTB 9
A23J52 55  CTB 9              1
A20J42 23  CTC 0
A23J51  1  CTC 0              1
A20J42 26  CTC 1
A23J51  2  CTC 1              1
A20J42 29  CTC 2
A23J51  3  CTC 2              1
A20J42 32  CTC 3
A23J51  4  CTC 3              1
A20J42 35  CTC 4
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A23J51	5	CTC 4	1	
A20J42	38	CTC 5		
A23J51	6	CTC 5	1	
A20J42	42	CTC 6		
A23J51	7	CTC 6	1	
A20J42	3	CTC 7		
A23J51	8	CTC 7	1	
A20J42	6	CTC 8		
A23J51	9	CTC 8	1	
A20J42	9	CTC 9		
A23J51	10	CTC 9	1	
A13J60	36	C/W(L)		
A24J53	58	C/W(L)	1	GEN 10
A21J47	87	DATA AVAIL A	22	E11 L-22
A24J53	69	DATA AVAIL A	1	GEN 30
A24J54	4	DATA AVAIL A	7	
A22J49	40	DATA AVAIL B	21	E12-20
A24J53	39	DATA AVAIL B	1	GEN 30
A24J54	9	DATA AVAIL B	7	
A22J49	48	DATA ENABLE 3A	1	
A24J54	6	DATA ENABLE 3A	2	GEN 10
A23J51	62	DATA ENABLE 3B	1	
A24J54	5	DATA ENABLE 3B	2	GEN 10
J09	17	DISABLE AR COUNT		
A24J53	2	DISABLE AR COUNT	2	
P61	8	DUMP		
A24J53	22	DUMP	1	
A19J40	12	EDS ABT ENAB RET		NOT USED EV CONN
A15J35	19	EDS ABT SIG1 RET		NOT WIRED S
A16J35	19	EDS ABT SIG1 RET		NOT WIRED S
A19J40	7	EDS ABT SIG1 RET		NOT WIRED S
A15J35	22	EDS ABT SIG2 RET		NOT WIRED S
A16J35	22	EDS ABT SIG2 RET		NOT WIRED S
A19J40	10	EDS ABT SIG2 RET		NOT WIRED S
A15J35	25	EDS ABT SIG3 RET		NOT WIRED S
A16J35	25	EDS ABT SIG3 RET		NOT WIRED S
A19J40	8	EDS ABT SIG3 RET		NOT WIRED S
P01	14	EDS ABT SIG 1		
A15J35	14	EDS ABT SIG 1		
A16J35	14	EDS ABT SIG 1		
A19J40	15	EDS ABT SIG 1		
P01	15	EDS ABT SIG 2		
A15J35	11	EDS ABT SIG 2		
A16J35	11	EDS ABT SIG 2		
A19J40	16	EDS ABT SIG 2		
P01	16	EDS ABT SIG 3		
A15J35	8	EDS ABT SIG 3		
A16J35	8	EDS ABT SIG 3		
A19J40	19	EDS ABT SIG 3		
P01	24	ELS ENABLE ON		
A15J35	44	ELS ENABLE ON		
A16J35	44	ELS ENABLE ON		
A15J35	41	ELS ENAB ON RET		
A16J35	41	ELS ENAB ON RET		
A17J38	32	EL SHIFT 1		
A24J53	60	EL SHIFT 1	1	GEN 10
A18J38	32	EL SHIFT 2		
A24J53	59	EL SHIFT 2	1	GEN 10
P10	4	EN ARA		
A24J53	77	EN ARA	4	
P10	5	EN ARB		

A24J53	66	FN ARB	4	
P10	6	FN A		
A24J53	5	FN A	5	GFN 10
P10	7	FN B		
A24J53	6	FN B	3	GFN 10
A23J51	15	EN CMP AR(L)	1	
A23J52	70	EN CMP AR(L)	2	
A24J53	28	FN CMP AR(L)	3	GFN 10
A22J49	3	EN CMP MRA(L)	1	
A24J53	23	FN CMP MRA(L)	3	GFN 10
A22J49	20	EN CMP MRB(L)	1	
A24J53	24	FN CMP MRB(L)	3	GEN 10
A23J51	14	FN C AR(L)	1	
A23J52	67	FN C AR(L)	2	
A24J53	67	FN C AR(L)	2	GEN 10
P10	8	FN MRA		
A24J53	17	EN MRA	4	
P10	9	FN MRB		
A24J53	18	FN MRB	4	
A22J49	7	EN SAA(L)	5	
A24J53	62	EN SAA(L)	1	GEN 10
A22J49	24	EN SAB(L)	5	
A24J53	61	EN SAB(L)	1	GEN 10
A23J51	13	EN S AR(L)	1	
A23J52	64	EN S AR(L)	2	
A24J53	65	EN S AR(L)	3	GEN 10
P10	43	EN S MR(L)		TEST TOOL
A22J49	4	EN S MR(L)	2	
A24J53	76	EN S MR(L)	4	
A23J51	11	EN XFER	10	
A23J52	61	EN XFER	20	
A24J53	27	EN XFER	1	GEN 30
A15J35	31	ET OFF RET		
A16J35	31	ET OFF RET		
P01	12	ET OFF		
A15J35	6	ET OFF		
A16J35	6	ET OFF		
A15J36	19	EVENT IND 1A		
A17J37	42	EVENT IND 1A		
A15J36	20	EVENT IND 1B		
A18J37	42	EVENT IND 1B		
A15J36	52	EVENT IND 2A		
A16J39	20	EVENT IND 2A		
A21J47	55	FAULT LIGHT		GEN XISTOR
J09	12	FAULT RESET(L)		
A21J47	54	FAULT RESET(L)		
P61	18	GND1-1		
P61	19	GND1-2		
P61	20	GND2-1		
P61	21	GND2-2		
P61	25	GND3A		
P61	26	GND3B		
P61	27	GND3C-1		
P61	28	GND3C-2		
P61	29	GND3D-1		
P61	30	GND3D-2		
P61	31	GND3F-1		
P61	32	GND3E-2		
P61	23	GND4-1		
P61	24	GND4-2		
MB2		GND 1A		22AWG 2WIRES

MB2	GND 1B		22AWG 1WIRES
MB2	GND 1C		22AWG 1WIRES
MB2	GND 1D		22AWG 2WIRES
MB2	GND 1F		22AWG 2WIRES
MB2 C21-X	GND 1F C		30-GA-COML
MB2 C29-X	GND 1F C		30-GA-COM L
MB2 C30-X	GND 1F C		30-GA-COM L
MB2	GND 1F		22AWG 1WIRES
P10 59	GND 1		
A13J59 29	GND 1		
A13J59 30	GND 1		
A14J33 55	GND 1		MB TRACE
A14J34 6	GND 1		MB TRACE
A14J34 7	GND 1		MB TRACE
A14J34 8	GND 1		MB TRACE
A15J36 61	GND 1		MB TRACE
A16J39 61	GND 1		MB TRACE
A16J39 31	GND 1		
A17J37 61	GND 1		MB TRACE
A17J38 61	GND 1		MB TRACE
A18J37 61	GND 1		MB TRACE
A18J38 51	GND 1		
A18J38 61	GND 1		MB TRACE
A18J38 48	GND 1		
A19J41 61	GND 1		MB TRACE
A20J41 61	GND 1		MB TRACE
A20J42 52	GND 1		MB TRACE SHIELD
A20J42 40	GND 1		MB TRACE
A20J42 43	GND 1		MB TRACE
A21J47 88	GND 1		MB TRACE
A21J47 89	GND 1		MB TRACE
A21J50A88	GND 1		MB TRACE
A21J50A89	GND 1		MB TRACE
A22J49 88	GND 1		MB TRACE
A22J49 89	GND 1		MB TRACE
A22J50 88	GND 1		MB TRACE
A22J50 89	GND 1		MB TRACE
A23J51 88	GND 1		MB TRACE
A23J51 89	GND 1		MB TRACE
A23J52 89	GND 1		MB TRACE
A23J52 88	GND 1		MB TRACE
A24J53 89	GND 1		MB TRACE
A24J53 88	GND 1		MB TRACE
A24J54 89	GND 1		MB TRACE
A24J54 88	GND 1		MB TRACE
MB2 E10	GND 1		MB TRACE
A13J59 38	GND 2		
A13J59 37	GND 2		
A14J33 58	GND 3A		MB TRACE
A19J41 58	GND 3A		MB TRACE
A19J41 59	GND 3A		MB TRACE
MB2 E 3	GND 3A		MB TRACE
A14J34 58	GND 3B		MB TRACE
A20J41 59	GND 3B		MB TRACE
A20J41 58	GND 3B		MB TRACE
MB2 E 9	GND 3B		MB TRACE
A15J36 58	GND 3C		MB TRACE
A15J36 59	GND 3C		MB TRACE
A17J37 58	GND 3C		MB TRACE
A17J38 59	GND 3C		MB TRACE
A17J38 57	GND 3C		MB TRACE

A17J38 58	GND 3C	MB TRACE
MB2 E12	GND 3C	MB TRACE
A16J39 59	GND 3D	MB TRACE
A16J39 58	GND 3D	MB TRACE
A18J37 58	GND 3D	MB TRACE
A18J38 58	GND 3D	MB TRACE
A18J38 59	GND 3D	MB TRACE
A18J38 57	GND 3D	
MB2 E 2	GND 3D	MB TRACE
A20J42 59	GND 3E	MB TRACE
A20J42 58	GND 3E	MB TRACE
MB2 E 1	GND 3E	
A14J34 59	GND 4	MB TRACE
A14J34 57	GND 4	MB TRACE
A15J35 61	GND 4	MB TRACE
A16J35 61	GND 4	MB TRACE
A17J37 60	GND 4	MB TRACE
A17J38 60	GND 4	MB TRACE
A18J37 60	GND 4	MB TRACE
A18J38 60	GND 4	MB TRACE
A19J40 4	GND 4	MB TRACE
MB2 E 5	GND 4	MB TRACE
A19J40 56	GOA	MB1 AND TT
A19J40 55	GOB	MB1 AND TT
A19J40 13	GO SIG RET	NOT WIRED S
A17J37 41	IMMEDIATE NO 1A	
A24J54 21	IMMEDIATE NO 1A	CTL SIGNAL
A18J37 41	IMMEDIATE NO 1B	
A24J54 56	IMMEDIATE NO 1B	CTL SIGNAL
A15J36 37	IMMEDIATE NO 2A	
A24J54 18	IMMEDIATE NO 2A	CTL SIGNAL
A16J39 48	IMMEDIATE NO 2B	
A24J54 63	IMMEDIATE NO 2B	CTL SIGNAL
A17J37 52	IM NO SET 1A	
A24J54 82	IM NO SET 1A	
A18J37 52	IM NO SET 1B	
A24J54 48	IM NO SET 1B	
A15J36 15	IM NO SET 2A	
A24J54 83	IM NO SET 2A	
A16J39 15	IM NO SET 2B	
A24J54 44	IM NO SET 2B	
A15J36 47	I1A-1 RET	
A17J37 9	I1A-1 RET	
A15J36 41	I1A-1	
A17J37 11	I1A-1	
A15J36 6	I1A-2 RET	
A16J39 47	I1A-2 RET	
A15J36 8	I1A-2	
A16J39 41	I1A-2	
A15J36 48	I1B-1 RET	
A18J37 9	I1B-1 RET	
A15J36 42	I1B-1	
A18J37 11	I1B-1	
A15J36 43	I2A-1	
A17J37 37	I2A-1	
A15J36 53	I2B-1 RET	
A18J37 38	I2B-1 RET	
A17J37 38	I2B-1	
A18J37 37	I2B-1	
A15J36 26	I2-2 RET	
A16J39 53	I2-2 RET	

A15J36	25	I2-2		
A16J39	43	I2-2		
A15J36	44	I3A-1		
A17J37	6	I3A-1		
A15J36	54	I3B-1 RFT		
A18J37	8	I3B-1 RFT		
A17J37	8	I3B-1		
A18J37	6	I3B-1		
A15J36	24	I3-2 RFT		
A16J39	54	I3-2 RFT		
A15J36	23	I3-2		
A16J39	44	I3-2		
A15J36	45	I4A-1		
A17J37	5	I4A-1		
A15J36	31	I4B-1 RFT		
A18J37	4	I4B-1 RFT		
A17J37	4	I4B-1		
A18J37	5	I4B-1		
A15J36	22	I4-2 RFT		
A16J39	57	I4-2 RFT		
A15J36	21	I4-2		
A16J39	45	I4-2		
A15J35	28	LIFTOFF RET		
A16J35	28	LIFTOFF RET		
P01	11	LIFTOFF		
A15J35	5	LIFTOFF		
A16J35	5	LIFTOFF		
P01	22	LMSLA SEP INIT		
A15J35	56	LMSLA SEP INIT		
A16J35	56	LMSLA SEP INIT		
A15J35	53	LMSLA SEP INI RT		
A16J35	53	LMSLA SEP INI RT		
P10	40	LOAD(L)		
A24J53	16	LOAD(L)	1	
P10	41	LOAD DISABLE(L)		TEST TOOL
MB2	R37-X	LOAD DISABLE TT		
MB2	C37-Z	LOAD DISABLE (L)		
A24J54	31	LOAD DISABLE (L)	2	
A17J38	47	LOGIC BUSS 0		
A18J38	17	LOGIC BUSS 0		
P61	48	LOGIC BUSS		
P61	49	LOGIC BUSS		
A14J34	11	LOGIC BUSS		MB TRACE
A14J34	9	LOGIC BUSS		MB TRACE
A15J36	57	LOGIC BUSS		MB TRACE
A16J39	52	LOGIC BUSS		MB TRACE
A17J38	17	LOGIC BUSS		
A17J38	52	LOGIC BUSS		MB TRACE
A18J38	52	LOGIC BUSS		MB TRACE
MB2	E 7	LOGIC BUSS		MB TRACE
P61	10	LOGIC BUS IN TOL		
A18J38	47	LOGIC BUS IN TOL		
A20J42	12	MAN RESET 6		
A16J39	40	MAN RESET 7		
A20J42	45	MAN RESET 7		
A15J36	40	MAN RESET 8		
A16J39	22	MAN RESET 8		
A21J47	52	MC FAULT(L)	1	
A24J53	70	MC FAULT(L)		GEN 10
A22J49	5	MRA CLOCK(L)	1	
A24J53	81	MRA CLOCK(L)	1	GEN 10

A22J49 22	MRB CLOCK(L)	1	
A24J53 80	MRB CLOCK(L)	1	GEN 10
A22J49 63	MRO*	1	GEN 10
A24J54 71	MRO*	2	
A13J60 10	MRO		
A21J47 28	MRO	1	E4 L-1
A22J49 26	MRO	2	E1 1 GEN 10
A24J54 76	MRO	2	
A13J60 40	MR10		
A21J50A 6	MR10	1	
A22J49 36	MR10	2	E11 1 GEN 10
A13J60 41	MR11		
A22J49 37	MR11		
A13J60 11	MR1		
A21J47 68	MR1	1	E5 L-1
A22J49 27	MR1	2	E2 1 GEN 10
A24J54 74	MR1	2	
A13J60 12	MR2		
A21J47 80	MR2	1	E6 L-1
A22J49 28	MR2	2	E3 1 GEN 10
A13J60 13	MR3		
A21J47 81	MR3	1	E7 L-1
A22J49 29	MR3	2	E4 1 GEN 10
A13J60 14	MR4		
A21J47 82	MR4	1	E8 L-1
A22J49 30	MR4	2	E5 1 GEN 10
A13J60 15	MR5		
A21J47 83	MR5	1	E9 L-1
A22J49 31	MR5	2	E6 1 GEN 10
A13J60 16	MR6		
A21J47 84	MR6	1	E10 L-1
A22J49 32	MR6	2	E7 1 GEN 10
A13J60 17	MR7		
A21J50A52	MR7	1	
A22J49 33	MR7	2	E8 1 GEN 10
A13J60 38	MR8		
A21J50A25	MR8	1	
A22J49 34	MR8	2	E9 1 GEN 10
A13J60 39	MR9		
A21J50A 9	MR9	1	
A22J49 35	MR9	2	E10 1 GEN 10
A21J47 57	MR FAULT(L)	1	
A22J49 1	MR FAULT(L)		GEN 10
P10 50	MR IN		TEST TOOL
A22J49 2	MR IN	2	
A21J50A87	MWR 3A(L)	6	GEN 10
A24J54 19	MWR 3A(L)	2	
A22J50 7	MWR 3B(L)	7	GEN 10
A24J54 54	MWR 3B(L)	2	
A22J49 53	NO A(L)	1	
A24J54 49	NO A(L)	1	GEN 10
A15J36 30	NO A RET		
A17J38 11	NO A RET		
A17J37 36	NO A		
A24J54 8	NO A		
A23J51 69	NO B(L)	1	
A24J54 58	NO B(L)	1	GEN 10
A16J39 30	NO B RET		
A18J38 11	NO B RET		
A18J37 36	NO B		
A24J54 66	NO B		

J09	6	OS RESET INCL		
A14J34	12	OS RESET INCL		
P01	27	OUTPUT SW RESET		
A15J35	26	OUTPUT SW RESET		
A16J35	26	OUTPUT SW RESET		
A15J35	23	OUT SW RESET RET		
A16J35	23	OUT SW RESET RET		
P01	17	OX DMP ENABLE		
A15J35	20	OX DMP ENABLE		
A16J35	20	OX DMP ENABLE		
A19J40	22	OX DMP ENABLE		
A15J35	13	OX DUMP ENABL R		NOT WIRED S
A16J35	13	OX DUMP ENABL R		NOT WIRED S
A19J40	11	OX DUMP ENABL R		NOT WIRED S
P61	11	PDIP		
A24J53	43	PDIP	3	DISCRETES GEN 10
A22J49	51	POA*	1	GEN 30
A23J51	44	POA*	5	
A24J53	56	POA*	2	
A24J54	3	POA*	2	
A21J47	36	POA	12	
A22J49	52	POA	3	GEN 30
A23J51	41	POA	4	
A24J53	29	POA	5	
A24J54	26	POA	4	
A23J51	67	POB*	4	GEN 30
A24J53	3	POB*	3	
A24J54	61	POB*	2	
A21J47	73	POB	3	
A23J51	68	POB	1	GEN 30
A24J53	19	POB	5	
A24J54	53	POB	4	
A24J54	32	POC*		GEN 30
J09	20	POC *		
A17J37	33	POS 1A RET		
A17J38	10	POS 1A RET		
A17J37	35	POS 1A		
A17J38	7	POS 1A		
A17J38	12	POS 1B RET		
A18J37	33	POS 1B RET		
A17J38	9	POS 1B		
A18J37	35	POS 1B		
A15J36	33	POS 2A RET		
A18J38	10	POS 2A RET		
A15J36	35	POS 2A		
A18J38	7	POS 2A		
A16J39	33	POS 2B RET		
A18J38	12	POS 2B RET		
A16J39	35	POS 2B		
A18J38	9	POS 2B		
J09	21	PROGRAM START(L)		
A22J49	62	PROGRAM START (L)		DISCRETE LOAD
A23J51	77	PROGRAM START (L)	1	DISCRETE
P61	5	PS IN TOL-1		
P61	6	PS IN TOL-2		
A16J39	56	PS IN TOL		
A17J38	50	PS IN TOL		
A18J38	50	PS IN TOL		
A15J36	56	PS IN TOL		
A21J47	29	PWR DEMAND MOM A	1	
A22J49	59	PWR DEMAND MOM A		GEN 1.25 (LP)

A21J47 38	PWR DEMAND MOM B	2		
A23J51 74	PWR DEMAND MOM B	1	GEN 25	
A21J47 39	PWR DEMAND OFF A	1		
A22J49 58	PWR DEMAND OFF A		GEN 1.25 (LP)	
A21J47 40	PWR DEMAND OFF B	1		
A23J51 73	PWR DEMAND OFF B	1	GEN 25	
A21J47 35	PWR DEMAND	3		
A24J53 21	PWR DEMAND	3	DISCRETE	
A17J37 7	PWR DOWN A1			
A20J41 14	PWR DOWN A1			
A19J41 14	PWR DOWN A2			
A20J41 16	PWR DOWN A2			
A16J39 39	PWR DOWN A3			
A19J41 16	PWR DOWN A3			
A14J33 36	PWR DOWN A4			
A16J39 37	PWR DOWN A4			
A14J33 35	PWR DOWN A5			
A15J36 39	PWR DOWN A5			
A18J37 7	PWR DOWN B1			
A20J41 18	PWR DOWN B1			
A19J41 18	PWR DOWN B2			
A20J41 20	PWR DOWN B2			
A16J39 26	PWR DOWN B3			
A19J41 20	PWR DOWN B3			
A14J34 49	PWR DOWN B4			
A16J39 25	PWR DOWN B4			
A14J34 51	PWR DOWN B5			
A15J35 3	PWR DOWN B5		TO E13 A15J36	
A17J38 53	PWR DOWN (V) A			
A22J49 47	PWR DOWN (V) A			
A18J38 53	PWR DOWN (V) B			
A23J51 61	PWR DOWN (V) B	1	DISCRETE	
J09 13	PWR HOLD*			
A22J49 41	PWR HOLD*	4		
A23J51 55	PWR HOLD*	5		
A24J53 11	PWR HOLD*	7	GEN 30 E7-L2	
A21J47 58	PWR INHIBIT (L)			
A24J53 31	PWR INHIBIT (L)			
A18J38 23	PWR ON CLEAR			
A21J47 60	PWR ON CLEAR			
A22J49 64	PWR ON CLEAR			
A23J51 52	PWR ON CLEAR			
A24J54 12	PWR ON CLEAR			
P10 39	PWR REQUEST (L)			
A22J49 46	PWR REQUEST (L)	3		
A23J51 60	PWR REQUEST (L)	2		
A24J54 28	PWR REQUEST (L)	2		
MB2 C38-Z	PWR REQUEST (L)			
MB2 R38-X	PWR REQUEST (L)			
A14J33 37	PWR UP INT 1A			
A24J54 7	PWR UP INT 1A			CORE SIGNAL
A14J34 50	PWR UP INT 1B			
A24J54 65	PWR UP INT 1B			
A14J33 39	PWR UP INT 2A			
A15J35 27	PWR UP INT 2A		USED ON A15 ONLY	
A14J34 52	PWR UP INT 2B			
A16J39 17	PWR UP INT 2B			
A14J33 18	PWR UP RESET A5			
A14J34 27	PWR UP RESET B5			
A14J33 34	PWR UP (V) A			
A17J38 54	PWR UP (V) A			

A14J34 43	PWR UP (V) B			
A18J38 54	PWR UP (V) B			
J09 18	READ B(L)			
A24J54 60	READ B(L)		2	GEN 10
A21J47 13	READ CONT A		2	GEN 10
A24J54 73	READ CONT A		1	
A21J47 16	READ CONT B		2	GEN 10
A24J54 59	READ CONT B		1	
A22J49 50	RECYCLE A(L)			GEN 10
A24J53 20	RECYCLE A(L)		2	E9 L-1
A23J51 65	RECYCLE B(L)		1	GEN 10
A24J53 15	RECYCLE B(L)		2	E14 L-1
A21J47 49	RED FAULT(L)		1	
A22J49 39	RED FAULT(L)			GEN 30
A17J37 32	RESET ELB 1A			
A14J34 48	RESET ELB 1B	IND		
A18J37 32	RESET ELB 1B			
A15J36 5	RESET ELB 2A			
A14J34 47	RESET ELB 2B	IND		
A16J39 .5	RESET ELB 2B			
A14J34 28	RESET 9			
A17J38 44	RESTART 1A-1			
A19J41 10	RESTART 1A-1			
A17J37 17	RESTART 1A-2			
A19J41 13	RESTART 1A-2			
A18J38 44	RESTART 1B-1			
A20J41 10	RESTART 1B-1			
A18J37 17	RESTART 1B-2			
A20J41 13	RESTART 1B-2			
A15J36 29	RESTART 2A-1			
A17J38 43	RESTART 2A-1			
A17J38 42	RESTART 2A-2			
A19J41 12	RESTART 2A-2			
A15J36 28	RESTART 2A-3			
A19J41 15	RESTART 2A-3			
A16J39 29	RESTART 2B-1			
A18J38 43	RESTART 2B-1			
A18J38 42	RESTART 2B-2			
A20J41 12	RESTART 2B-2			
A16J39 28	RESTART 2B-3			
A20J41 15	RESTART 2B-3			
A13J60 37	R/R(L)			
A24J53 57	R/R(L)		1	GEN 10
A13J60 28	SA0			
A22J49 8	SA0		2	
A13J60 49	SA10			
A22J49 18	SA10		2	
A13J60 50	SA11			
A22J49 19	SA11		2	
A13J60 29	SA1			
A22J49 9	SA1		2	
A13J60 30	SA2			
A22J49 10	SA2		2	
A13J60 31	SA3			
A22J49 11	SA3		2	
A13J60 32	SA4			
A22J49 12	SA4		2	
A13J60 33	SA5			
A22J49 13	SA5		2	
A13J60 45	SA6			
A22J49 14	SA6		2	

A13J60 46	SA7			
A22J49 15	SA7	2		
A13J60 47	SA8			
A22J49 16	SA8	2		
A13J60 48	SA9			
A22J49 17	SA9	2		
A15J36 17	SEQ CLOCK 1 (V)			
A21J47 61	SEQ CLOCK 1 (V)	1		
A16J39 42	SEQ CLOCK 2 (V)			
A21J47 65	SEQ CLOCK 2 (V)	1		
A15J36 27	SEQ GEN INHIBIT			
A16J39 8	SEQ GEN INHIBIT			
A21J47 17	SEQ GEN INHIBIT	1		GEN 10
A15J36 60	SEQ OVER 1			
A21J47 62	SEQ OVER 1	1		DISCRETE LOAD
A16J39 60	SEQ OVER 2			
A21J47 66	SEQ OVER 2	1		DISCRETE LOAD
J09 25	SET AMP A(L)			
A23J51 79	SET AMP A(L)	1		GEN 10
A23J51 48	SET AMP A	1		GEN 10
A23J52 6	SET AMP A			
J09 26	SET AMP B(L)			
A23J51 80	SET AMP B(L)	1		GEN 10
A23J51 51	SET AMP B			GEN 10
A23J52 24	SET AMP B			
A23J52 75	SET AMP C(L) TT			
J09 27	SET AMP C(L)			
A23J51 54	SET AMP C(L)			GEN 10
A23J52 72	SET AMP C(L)	1		
A17J38 13	SET BR ADD 1-0A			
A21J50A45	SET BR ADD 1-0A			
A17J38 15	SET BR ADD 1-0B			
A22J50 45	SET BR ADD 1-0B			
A17J38 16	SET BR ADD 1-1A			
A21J50A42	SET BR ADD 1-1A			
A17J38 18	SET BR ADD 1-1B			
A22J50 42	SET BR ADD 1-1B			
A17J38 19	SET BR ADD 1-2A			
A21J50A38	SET BR ADD 1-2A			
A17J38 21	SET BR ADD 1-2B			
A22J50 38	SET BR ADD 1-2B			
A17J38 22	SET BR ADD 1-3A			
A21J50A39	SET BR ADD 1-3A			
A17J38 24	SET BR ADD 1-3B			
A22J50 39	SET BR ADD 1-3B			
A17J38 25	SET BR ADD 1-4A			
A21J50A36	SET BR ADD 1-4A			
A17J38 27	SET BR ADD 1-4B			
A22J50 36	SET BR ADD 1-4B			
A17J38 28	SET BR ADD 1-5A			
A21J50A34	SET BR ADD 1-5A			
A17J38 30	SET BR ADD 1-5B			
A22J50 34	SET BR ADD 1-5B			
A17J38 31	SET BR ADD 1-6A			
A21J50A26	SET BR ADD 1-6A			
A17J38 33	SET BR ADD 1-6B			
A22J50 26	SET BR ADD 1-6B			
A17J38 34	SET BR ADD 1-7A			
A21J50A27	SET BR ADD 1-7A			
A17J38 35	SET BR ADD 1-7B			
A22J50 27	SET BR ADD 1-7B			

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A17J38 36   SET BR ADD 1-8A
A21J50A33   SET BR ADD 1-8A
A17J38 37   SET BR ADD 1-8B
A22J50 33   SET BR ADD 1-8B
A17J38 38   SET BR ADD 1-9A
A21J50A22   SET BR ADD 1-9A
A17J38 39   SET BR ADD 1-9B
A22J50 22   SET BR ADD 1-9B
A18J38 13   SET BR ADD 2-0A
A21J50A19   SET BR ADD 2-0A
A18J38 15   SET BR ADD 2-0B
A22J50 19   SET BR ADD 2-0B
A18J38 16   SET BR ADD 2-1A
A21J50A20   SET BR ADD 2-1A
A18J38 18   SET BR ADD 2-1B
A22J50 20   SET BR ADD 2-1B
A18J38 19   SET BR ADD 2-2A
A21J50A21   SET BR ADD 2-2A
A18J38 21   SET BR ADD 2-2B
A22J50 21   SET BR ADD 2-2B
A18J38 22   SET BR ADD 2-3A
A21J50A18   SET BR ADD 2-3A
A18J38 24   SET BR ADD 2-3B
A22J50 18   SET BR ADD 2-3B
A18J38 25   SET BR ADD 2-4A
A21J50A13   SET BR ADD 2-4A
A18J38 27   SET BR ADD 2-4B
A22J50 13   SET BR ADD 2-4B
A18J38 28   SET BR ADD 2-5A
A21J50A14   SET BR ADD 2-5A
A18J38 30   SET BR ADD 2-5B
A22J50 14   SET BR ADD 2-5B
A18J38 31   SET BR ADD 2-6A
A21J50A82   SET BR ADD 2-6A
A18J38 33   SET BR ADD 2-6B
A22J50 82   SET BR ADD 2-6B
A18J38 34   SET BR ADD 2-7A
A21J50A83   SET BR ADD 2-7A
A18J38 35   SET BR ADD 2-7B
A22J50 83   SET BR ADD 2-7B
A18J38 36   SET BR ADD 2-8A
A21J50A80   SET BR ADD 2-8A
A18J38 37   SET BR ADD 2-8B
A22J50 80   SET BR ADD 2-8B
A18J38 38   SET BR ADD 2-9A
A21J50A79   SET BR ADD 2-9A
A18J38 39   SET BR ADD 2-9B
A22J50 79   SET BR ADD 2-9B
A19J41 31   SET CLOCK 1A
A21J50A55   SET CLOCK 1A
A20J41 31   SET CLOCK 1B
A22J50 55   SET CLOCK 1B
A19J41 33   SET CLOCK 2A
A21J50A64   SET CLOCK 2A
A20J41 33   SET CLOCK 2B
A22J50 64   SET CLOCK 2B
A19J41 34   SET CLOCK 3A
A21J50A65   SET CLOCK 3A
A20J41 34   SET CLOCK 3B
A22J50 65   SET CLOCK 3B
A19J41 36   SET CLOCK 4A
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A21J50A56   SET CLOCK 4A
A20J41 36   SET CLOCK 4B
A22J50 56   SET CLOCK 4B
A14J33  9   SET CMD BIT 0-0A
A21J50A 1   SET CMD BIT 0-0A
A14J34 18   SET CMD BIT 0-0B
A22J50  1   SET CMD BIT 0-0B
A14J33  8   SET CMD BIT 0-1A
A21J50A 4   SET CMD BIT 0-1A
A14J34 17   SET CMD BIT 0-1B
A22J50  4   SET CMD BIT 0-1B
A14J33  7   SET CMD BIT 1-0A
A21J50A 3   SET CMD BIT 1-0A
A14J34 16   SET CMD BIT 1-0B
A22J50  3   SET CMD BIT 1-0B
A14J33  6   SET CMD BIT 1-1A
A21J50A 2   SET CMD BIT 1-1A
A14J34 15   SET CMD BIT 1-1B
A22J50  2   SET CMD BIT 1-1B
A14J33  5   SET CMD BIT 2-0A
A21J50A29   SET CMD BIT 2-0A
A14J34 14   SET CMD BIT 2-0B
A22J50 29   SET CMD BIT 2-0B
A14J33  4   SET CMD BIT 2-1A
A21J50A28   SET CMD BIT 2-1A
A14J34 13   SET CMD BIT 2-1B
A22J50 28   SET CMD BIT 2-1B
A14J33 33   SET CMD BIT 3-0A
A21J50A41   SET CMD BIT 3-0A
A14J34 42   SET CMD BIT 3-0B
A22J50 41   SET CMD BIT 3-0B
A14J33 32   SET CMD BIT 3-1A
A21J50A40   SET CMD BIT 3-1A
A14J34 41   SET CMD BIT 3-1B
A22J50 40   SET CMD BIT 3-1B
A14J33 31   SET CMD BIT 4-0A
A21J50A12   SET CMD BIT 4-0A
A14J34 40   SET CMD BIT 4-0B
A22J50 12   SET CMD BIT 4-0B
A14J33 30   SET CMD BIT 4-1A
A21J50A 8   SET CMD BIT 4-1A
A14J34 39   SET CMD BIT 4-1B
A22J50  8   SET CMD BIT 4-1B
A14J33 29   SET CMD BIT 5-0A
A21J50A11   SET CMD BIT 5-0A
A14J34 38   SET CMD BIT 5-0B
A22J50 11   SET CMD BIT 5-0B
A14J33 28   SET CMD BIT 5-1A
A21J50A15   SET CMD BIT 5-1A
A14J34 37   SET CMD BIT 5-1B
A22J50 15   SET CMD BIT 5-1B
A17J37 40   SET EVENT 1-1A
A21J50A30   SET EVENT 1-1A
A18J37 40   SET EVENT 1-1B
A22J50 30   SET EVENT 1-1B
A17J37  1   SET EVENT 1-10A
A21J50A59   SET EVENT 1-10A
A18J37  1   SET EVENT 1-10B
A22J50 59   SET EVENT 1-10B
A17J37  3   SET EVENT 1-11A
A21J50A50   SET EVENT 1-11A
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A18J37  3   SET EVENT 1-11B
A22J50 50   SET EVENT 1-11B
A17J37 56   SET EVENT 1-12A
A21J50A51   SET EVENT 1-12A
A18J37 56   SET EVENT 1-12B
A22J50 51   SET EVENT 1-12B
A17J37 57   SET EVENT 1-13A
A21J50A 5   SET EVENT 1-13A
A18J37 57   SET EVENT 1-13B
A22J50  5   SET EVENT 1-13B
A17J37 44   SET EVENT 1-2A
A21J50A32   SET EVENT 1-2A
A18J37 44   SET EVENT 1-2B
A22J50 32   SET EVENT 1-2B
A17J37 48   SET EVENT 1-3A
A21J50A16   SET EVENT 1-3A
A18J37 48   SET EVENT 1-3B
A22J50 16   SET EVENT 1-3B
A17J37 45   SET EVENT 1-4A
A21J50A17   SET EVENT 1-4A
A18J37 45   SET EVENT 1-4B
A22J50 17   SET EVENT 1-4B
A17J37 46   SET EVENT 1-5A
A21J50A49   SET EVENT 1-5A
A18J37 46   SET EVENT 1-5B
A22J50 49   SET EVENT 1-5B
A17J37 43   SET EVENT 1-6A
A21J50A47   SET EVENT 1-6A
A18J37 43   SET EVENT 1-6B
A22J50 47   SET EVENT 1-6B
A17J37 51   SET EVENT 1-7A
A21J50A37   SET EVENT 1-7A
A18J37 51   SET EVENT 1-7B
A22J50 37   SET EVENT 1-7B
A17J37 50   SET EVENT 1-8A
A21J50A35   SET EVENT 1-8A
A18J37 50   SET EVENT 1-8B
A22J50 35   SET EVENT 1-8B
A17J37 47   SET EVENT 1-9A
A21J50A58   SET EVENT 1-9A
A18J37 47   SET EVENT 1-9B
A22J50 58   SET EVENT 1-9B
A15J36  7   SET EVENT 2-1A
A21J50A84   SET EVENT 2-1A
A16J39  7   SET EVENT 2-1B
A22J50 84   SET EVENT 2-1B
A15J36  9   SET EVENT 2-2A
A21J50A81   SET EVENT 2-2A
A16J39  9   SET EVENT 2-2B
A22J50 81   SET EVENT 2-2B
A15J36 10   SET EVENT 2-3A
A21J50A77   SET EVENT 2-3A
A16J39 10   SET EVENT 2-3B
A22J50 77   SET EVENT 2-3B
A15J36 11   SET EVENT 2-4A
A21J50A78   SET EVENT 2-4A
A16J39 11   SET EVENT 2-4B
A22J50 78   SET EVENT 2-4B
A15J36 12   SET EVENT 2-5A
A21J50A73   SET EVENT 2-5A
A16J39 12   SET EVENT 2-5B
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A22J50 73   SET EVENT 2-5B
A15J36 13   SET EVENT 2-6A
A21J50A74   SET EVENT 2-6A
A16J39 13   SET EVENT 2-6B
A22J50 74   SET EVENT 2-6B
A15J36 14   SET EVENT 2-7A
A21J50A75   SET EVENT 2-7A
A16J39 14   SET EVENT 2-7B
A22J50 75   SET EVENT 2-7B
A15J36 36   SET EVENT 2-8A
A21J50A70   SET EVENT 2-8A
A16J39 36   SET EVENT 2-8B
A22J50 70   SET EVENT 2-8B
A17J37 53   SET INH 1-1A
A21J50A43   SET INH 1-1A
A18J37 53   SET INH 1-1B
A22J50 43   SET INH 1-1B
A17J37 59   SET INH 1-2A
A21J50A44   SET INH 1-2A
A18J37 59   SET INH 1-2B
A22J50 44   SET INH 1-2B
A15J36 50   SET INH 2-1A
A21J50A23   SET INH 2-1A
A16J39 50   SET INH 2-1B
A22J50 23   SET INH 2-1B
A15J36 51   SET INH 2-2A
A21J50A24   SET INH 2-2A
A16J39 51   SET INH 2-2B
A22J50 24   SET INH 2-2B
A20J42 54   SET INPUT A
A23J52 48   SET INPUT A
A20J42 53   SET INPUT B
A23J52 69   SET INPUT B
A20J42 46   SET INPUT C
A23J52 36   SET INPUT C
A17J37 54   SET INT 1A
A24J54 75   SET INT 1A                                  DISCRETE CIRC
A18J37 54   SET INT 1B
A24J54 57   SET INT 1B                                  DISCRETE CIRC
A15J36 18   SET INT 2A
A24J54 78   SET INT 2A                                  DISCRETE CIRC
A16J39 18   SET INT 2B
A24J54 46   SET INT 2B                                  DISCRETE CIRC
A15J36 16   SET LOAD 1
A24J54  1   SET LOAD 1                          GEN 10
A16J39 16   SET LOAD 2
A24J54  2   SET LOAD 2                          GEN 10
A19J41  9   SET TIMING MEM A
A21J47 32   SET TIMING MEM A                    GEN XISTOR
A20J41  9   SET TIMING MEM B
A21J47 71   SET TIMING MEM B                    GEN XISTOR
A19J41 37   SET TIM BIT 0A
A21J50A71   SET TIM BIT 0A
A20J41 37   SET TIM BIT 0B
A22J50 71   SET TIM BIT 0B
A19J41 39   SET TIM BIT 1A
A21J50A72   SET TIM BIT 1A
A20J41 39   SET TIM BIT 1B
A22J50 72   SET TIM BIT 1B
A19J41 52   SET TIM BIT 10A
A21J50A57   SET TIM BIT 10A
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A20J41 52   SET TIM BIT 10B
A22J50 57   SET TIM BIT 10B
A19J41 54   SET TIM BIT 11A
A21J50A53   SET TIM BIT 11A
A20J41 54   SET TIM BIT 11B
A22J50 53   SET TIM BIT 11B
A19J41 40   SET TIM BIT 2A
A21J50A67   SET TIM BIT 2A
A20J41 40   SET TIM BIT 2B
A22J50 67   SET TIM BIT 2B
A19J41 42   SET TIM BIT 3A
A21J50A68   SET TIM BIT 3A
A20J41 42   SET TIM BIT 3B
A22J50 68   SET TIM BIT 3B
A19J41 43   SET TIM BIT 4A
A21J50A69   SET TIM BIT 4A
A20J41 43   SET TIM BIT 4B
A22J50 69   SET TIM BIT 4B
A19J41 45   SET TIM BIT 5A
A21J50A66   SET TIM BIT 5A
A20J41 45   SET TIM BIT 5B
A22J50 66   SET TIM BIT 5B
A19J41 46   SET TIM BIT 6A
A21J50A61   SET TIM BIT 6A
A20J41 46   SET TIM BIT 6B
A22J50 61   SET TIM BIT 6B
A19J41 48   SET TIM BIT 7A
A21J50A62   SET TIM BIT 7A
A20J41 48   SET TIM BIT 7B
A22J50 62   SET TIM BIT 7B
A19J41 27   SET TIM BIT 8A
A21J50A63   SET TIM BIT 8A
A20J41 27   SET TIM BIT 8B
A22J50 63   SET TIM BIT 8B
A19J41 51   SET TIM BIT 9A
A21J50A60   SET TIM BIT 9A
A20J41 51   SET TIM BIT 9B
A22J50 60   SET TIM BIT 9B
A21J50A 7   SET T1A              2
A24J54 79   SET T1A                                  GEN 10
A22J50  6   SET T1B              2
A24J54 55   SET T1B                                  GEN 10
A21J47 75   SET T2B              1
A24J54 47   SET T2B                                  GEN 10
A21J50A10   SET T2(L)A           1
A24J54 15   SET T2(L)A                               GEN 30
A22J50  9   SET T2(L)B           1
A24J54 51   SET T2(L)B           1                   GEN 30
A21J50A54   SET 1 ELB 1(L)A      7
A24J54 17   SET 1 ELB 1(L)A      1                   GEN 30
A22J50 54   SET 1 ELB 1(L)B      7
A24J54 41   SET 1 ELB 1(L)B      1                   GEN 30
A21J50A48   SET 1 ELB 2(L)A      7
A24J54 11   SET 1 ELB 2(L)A      1                   GEN 30
A22J50 48   SET 1 ELB 2(L)B      7
A24J54 38   SET 1 ELB 2(L)B      1                   GEN 30
A21J50A31   SET 2 ELB 1(L)A     11
A24J54 13   SET 2 ELB 1(L)A                          GEN 30
A22J50 31   SET 2 ELB 1(L)B     11
A24J54 69   SET 2 ELB 1(L)B                          GEN 30
A21J50A76   SET 2 ELB 2(L)A     11
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A24J54	10	SET 2 FLB 2(L)A		GEN 30
A22J50	76	SET 2 FLB 2(L)B	11	
A24J54	42	SET 2 FLB 2(L)B		GEN 30
A21J50A	46	SET 3 FLB 1(L)A	7	
A24J54	43	SET 3 FLB 1(L)A	2	GEN 30
A22J50	46	SET 3 FLB 1(L)B	7	
A24J54	36	SET 3 FLB 1(L)B	2	GEN 30
A21J50A	90	SET 3 FLB 2(L)A	2	
A24J54	40	SET 3 FLB 2(L)A		
A24J54	37	SET 3 FLB 2(L)B		
A22J50	10	SET 3 FLB 2(L) B	2	
J09	61	SHIELD		
J09	60	SHIELD		
P10	61	SHIELD		
P10	60	SHIELD		
A13J60	27	SHIELD		
A13J60	44	SHIELD		
J09	16	SINGLE STEP		
A24J54	70	SINGLE STEP	2	NOT USED
A17J37	28	SPARE-EVENT INPA		WIRED NOT USED
A17J37	30	SPARE-EVENT INPA		WIRED NOT USED
A18J37	30	SPARE-EVENT INPB		WIRED NOT USED
A18J37	28	SPARE-EVENT INPB		WIRED NOT USED
A15J35	40	SPARE FIL INP 2A		
A16J39	34	SPARE EVENT INP		
A15J35	45	SPARE FIL INP 1A		
A15J35	43	SPARE FIL INP 1A		
A16J35	43	SPARE FIL INP 1B		
A16J35	45	SPARE FIL INP 1B		
A15J35	48	SPARE FIL INP 2A		
A16J35	40	SPARE FIL INP 2B		
A16J35	48	SPARE FIL INP 2B		
A15J36	34	SPARE INP FILTER		
A15J35	7	SPARE OUT 1A		
A16J35	7	SPARE OUT 1B		
A15J35	10	SPARE OUT 2A		
A16J35	10	SPARE OUT 2B		
P10	53	SPARE		
P10	52	SPARE		
P10	55	SPARE		
P10	56	SPARE		
J09	15	SS ENABLE		
A24J54	68	SS ENABLE	4	
A19J41	19	START CLOCK A		
A21J47	31	START CLOCK A		GEN XISTOR
A20J41	19	START CLOCK B		
A21J47	70	START CLOCK B		GEN XISTOR
J09	11	STOP(L) A		
A21J47	90	STOP(L) A		
A22J49	45	STOP(L) A	1	
A19J41	4	STOP CLOCK A		
A21J47	33	STOP CLOCK A		GEN 10
A20J41	4	STOP CLOCK B		
A21J47	76	STOP CLOCK B		GEN 10
A21J47	74	STOP (L)B	2	
A22J50	52	STOP (L)B		GEN 10
A23J51	59	STOP (L)B	1	
A23J52	76	SUB 2(L)	2	
A24J53	50	SUB 2(L)	1	GEN 10
A22J49	54	SUB 2	1	
A23J51	17	SUB 2	23	

A24J53	26	SUP 2	1	GEN 3D
A21J47	78	SW PWR AVAIL*	2	
A24J53	79	SW PWR AVAIL*	1	GEN 3D NOT USED
J09	19	SW PWR AVAIL *		
A21J47	37	SW PWR AVAIL	1	
A22J49	42	SW PWR AVAIL	8	
A23J51	56	SW PWR AVAIL	4	
A24J53	63	SW PWR AVAIL	9	E1 L-6 GEN 3D
A22J49	67	SW PWR CLEAR		
A23451	63	SW PWR CLEAR		
A24J53	34	SW PWR CLEAR		
P61	7	SW PWR IN TOL(L)		
A21J47	47	SW PWR IN TOL(L)	1	
A15J35	29	TEST SW OFF RET		
A16J35	29	TEST SW OFF RET		
P01	26	TEST SW OFF		
A15J35	32	TEST SW OFF		
A16J35	32	TEST SW OFF		
A15J35	35	TEST SW ON RET		
A16J35	35	TEST SW ON RET		
P01	25	TEST SW ON		
A15J35	38	TEST SW ON		
A16J35	38	TEST SW ON		
J09	9	TEST TOOL GND		
J09	22	TEST TOOL GND		
P61	22	TEST TOOL GND		
P10	19	TEST 10 (L)		
P10	20	TEST 11 (L)		
P10	21	TEST 12		
P10	22	TEST 13		
P10	23	TEST 14		
P10	24	TEST 15		TEST TOOL
A24J53	71	TEST 15	2	
P10	25	TEST 16 (L)		
P10	26	TEST 17 (L)		
P10	27	TEST 18 (L)		
P10	28	TEST 19 (L)		
P10	10	TEST 1 (L)		
A24J53	46	TEST 1 (L)	4	
P10	29	TEST 20 (L)		
A23J51	20	TEST 20 (L)	1	
A23J52	17	TEST 20 (L)	1	
P10	30	TEST 21 (L)		
A23J51	22	TEST 21 (L)	1	
A23J52	23	TEST 21 (L)	1	
P10	31	TEST 22 (L)		
A23J51	28	TEST 22 (L)	1	
A23J52	41	TEST 22 (L)	1	
P10	32	TEST 23 (L)		
A23J51	30	TEST 23 (L)	1	
A23J52	47	TEST 23 (L)	1	
P10	33	TEST 24 (L)		
A23J51	24	TEST 24 (L)	1	
A23J52	32	TEST 24 (L)	1	
P10	34	TEST 25 (L)		
A23J51	21	TEST 25 (L)	1	
A23J52	20	TEST 25 (L)	1	
P10	35	TEST 26 (L)		
A23J51	29	TEST 26 (L)	1	
A23J52	44	TEST 26 (L)	1	
P10	36	TEST 27 (L)		

A23J51	33	TEST 27 (L)	1	
A23J52	56	TEST 27 (L)	1	
P10	37	TEST 28 (L)		
A23J51	36	TEST 28 (L)	1	
A23J52	65	TEST 28 (L)	1	
P10	38	TEST 29 (L)		
A23J51	37	TEST 29 (L)	1	
A23J52	68	TEST 29 (L)	1	
P10	11	TEST 2 (L)		
A24J53	47	TEST 2 (L)	4	
P10	12	TEST 3 (L)		
A24J53	41	TEST 3 (L)	1	
P10	13	TEST 4 (L)		
A24J53	55	TEST 4 (L)	2	
P10	14	TEST 5		
A24J53	49	TEST 5	6	
P10	15	TEST 6 (L)		
A24J53	72	TEST 6 (L)		
P10	16	TEST 7 (L)		
A24J53	78	TEST 7 (L)		
P10	17	TEST 8		
P10	18	TEST 9		
A19J41	28	TIMER A		
A21J47	41	TIMER A	3	
A20J41	28	TIMER B		
A21J47	79	TIMER B	1	
A21J47	42	TIMER CONT A(L)		GEN 1.25 (LP)
A22J49	60	TIMER CONT A(L)	1	
A23J51	75	TIMER CONT B (L)	1	
A21J47	43	TIMER CONT B (L)		GEN 1.25 (LP)
A21J47	30	TIME DELAY(L) A	2	GEN 10
A22J49	44	TIME DELAY(L) A	1	
A21J47	69	TIME DELAY(L) B	2	GEN 10
A23J51	58	TIME DELAY(L) B	1	
A21J47	72	TIMING BIT B	1	
A22J50	25	TIMING BIT B		GEN 10
A15J35	59	TNS CT RT CCW RT		
A16J35	59	TNS CT RT CCW RT		
P01	21	TRNS CNT RTD CCW		
A15J35	39	TRNS CNT RTD CCW		
A16J35	39	TRNS CNT RTD CCW		
A22J49	68	TURN PO OFF		
A24J54	34	TURN PO OFF		
A21J47	20	TO*	1	GEN 10
A24J53	40	TO*	4	
P10	44	TO		TEST TOOL
A21J47	10	TO	2	GEN 30
A22J49	43	TO	5	
A23J51	57	TO	3	
A24J53	25	TO	16	E8 L-4
A21J47	11	T1*	1	GEN 10
A21J47	1	T1	2	GEN 10
A23J51	42	T1	2	
A24J53	1	T1	2	
A21J47	12	T2*	2	GEN 10
P10	45	T2		TEST TOOL
A21J47	2	T2	5	GEN 30
A24J53	10	T2	12	
A21J47	3	T3	2	GEN 10
A24J53	54	T3	2	
A21J47	14	T4*	2	GEN 10

P10	46	T4		TFST TOOL	
A21J47	4	T4	2	GEN 10	
A24J53	13	T4	6	E10 L-4	
A21J47	15	T5*	2	GEN 10	
A24J53	30	T5*			
P10	47	T5		TEST TOOL	
A21J47	5	T5	2	GEN 10	
A24J54	30	T5	4		
A21J47	6	T6	3	GEN 30	
A24J53	8	T6	10	E6 L-6	
A21J47	7	T7	2	GEN 10	
A24J54	23	T7	2		
A21J47	18	T8*	10	GEN 30	
A22J49	49	T8*	3		
A23J51	64	T8*	1		
A24J54	52	T8*	6		
P10	48	T8		TEST TOOL	
A21J47	8	T8	4	GEN 10	
A24J54	67	T8	4		
A21J47	19	T9*	1	GEN 10	
A24J54	72	T9*	6		
P10	49	T9		TEST TOOL	
A21J47	9	T9	3	GEN 10	
A24J53	48	T9	8		
A21J47	48	T C FAULT OUT(L)	1		
A23J51	78	T C FAULT OUT(L)	1	GEN 10	
A13J59	27	T C FAULT (L)			
A23J51	66	T C FAULT (L)	1		
A19J40	57	T 42 SEC A			
A19J40	58	T 42 SEC B			
P61	9	VCC CONTROL(L)			
A24J53	42	VCC CONTROL(L)			
A17J38	20	VCC CONT(L)			
A17J38	14	VCC CONT G(L)			
A24J53	35	VCC CONT G(L)			
A24J54	20	YES 1A(F)			CTL SIGNAL
MB2	C31-Z	YES 1A(F)			
A22J49	55	YES 1A(L)	1		
A24J54	24	YES 1A(L)		GEN	LOW LEVEL
A17J37	34	YES 1A			
MB2	R31-X	YES 1A			
A24J54	80	YES 1B(F)			CTL SIGNAL
MB2	C33-Z	YES 1B(F)			
A23J51	70	YES 1B(L)	1		
A24J54	77	YES 1B(L)		GEN	LOW POWER
A18J37	34	YES 1B			
MB2	R33-X	YES 1B			
A24J54	25	YES 2A(F)			CTL SIGNAL
MB2	C32-Z	YES 2A(F)			
A22J49	56	YES 2A(L)	1		
A24J54	22	YES 2A(L)		GEN	LOW LEVEL
A15J36	32	YES 2A			
MB2	R32-X	YES 2A			
A24J54	84	YES 2B(F)			CTL SIGNAL
MB2	C34-Z	YES 2B(F)			
A23J51	71	YES 2B(L)	1		
A24J54	81	YES 2B(L)		GEN	LOW POWER
A16J39	32	YES 2B			
MB2	R34-X	YES 2B			
A19J40	50	Z-SPARE-IF			
A19J40	51	Z-SPARE-IF			

A19J40	9	Z-SPARE IF	
A19J40	1	Z-SPARE IF	
A19J40	59	Z-SPARE IF	
A19J40	60	Z-SPARE IF	
A19J40	54	Z-SPARE IF	
A19J40	40	Z-SPARE IF	
A19J40	41	Z-SPARE IF	
A16J35	3	Z-SPARE TO E13	ONLY USED A15
P01	20	Z-SPARE 1	
P01	28	Z-SPARE 2	
P01	29	Z-SPARE 3	
P01	30	Z-SPARE 4	
J09	5	Z-SPARE	
J09	14	Z-SPARE	
J09	7	Z-SPARE	
J09	23	Z-SPARE	
J09	24	Z-SPARE	
A14J33	2	Z-SPARE	NOT USED
A14J33	40	Z-SPARE	NOT USED
A14J33	41	Z-SPARE	NOT USED
A14J33	42	Z-SPARE	NOT USED
A14J33	43	Z-SPARE	NOT USED
A14J33	44	Z-SPARE	NOT USED
A14J33	45	Z-SPARE	NOT USED
A14J33	46	Z-SPARE	NOT USED
A14J33	47	Z-SPARE	NOT USED
A14J33	48	Z-SPARE	NOT USED
A14J33	49	Z-SPARE	NOT USED
A14J33	50	Z-SPARE	NOT USED
A14J33	51	Z-SPARE	NOT USED
A14J33	52	Z-SPARE	NOT USED
A14J33	53	Z-SPARE	NOT USED
A14J33	54	Z-SPARE	NOT USED
A14J33	3	Z-SPARE	NOT USED
A14J33	56	Z-SPARE	NOT USED
A14J33	57	Z-SPARE	NOT USED
A14J33	38	Z-SPARE	NOT USED
A14J33	59	Z-SPARE	NOT USED
A14J34	44	Z-SPARE	NOT USED
A14J34	10	Z-SPARE	NOT USED
A15J35	52	Z-SPARE	NOT USED
A15J35	30	Z-SPARE	NOT USED
A15J35	2	Z-SPARE	NOT USED
A15J35	24	Z-SPARE	NOT USED
A15J35	33	Z-SPARE	NOT USED
A15J35	18	Z-SPARE	NOT USED
A15J35	36	Z-SPARE	NOT USED
A15J35	1	Z-SPARE	NOT USED
A15J35	15	Z-SPARE	NOT USED
A15J35	21	Z-SPARE	NOT USED
A15J35	12	Z-SPARE	NOT USED
A15J36	38	Z-SPARE	
A16J35	1	Z-SPARE	NOT USED
A16J35	27	Z-SPARE	NOT USED
A16J35	52	Z-SPARE	NOT USED
A16J35	15	Z-SPARE	NOT USED
A16J35	21	Z-SPARE	NOT USED
A16J35	30	Z-SPARE	NOT USED
A16J35	12	Z-SPARE	NOT USED
A16J35	2	Z-SPARE	NOT USED
A16J35	33	Z-SPARE	NOT USED

A16J35	24	Z-SPARE	NOT USED
A16J35	36	Z-SPARE	NOT USED
A16J35	18	Z-SPARE	NOT USED
A16J39	6	Z-SPARE	NOT USED
A16J39	38	Z-SPARE	
A16J39	21	Z-SPARE	NOT USED
A16J39	27	Z-SPARE	
A16J39	19	Z-SPARE	NOT USED
A16J39	23	Z-SPARE	
A16J39	24	Z-SPARE	
A17J38	3	Z-SPARE	
A17J38	23	Z-SPARE	NOT USED
A17J38	45	Z-SPARE	
A17J38	29	Z-SPARE	NOT USED
A17J38	26	Z-SPARE	NOT USED
A17J38	56	Z-SPARE	NOT USED
A18J38	29	Z-SPARE	NOT USED
A18J38	45	Z-SPARE	
A18J38	3	Z-SPARE	
A18J38	26	Z-SPARE	NOT USED
A18J38	20	Z-SPARE	NOT USED
A18J38	14	Z-SPARE	
A19J40	5	Z-SPARE	NOT USED
A19J40	20	Z-SPARE	NOT USED
A19J40	21	Z-SPARE	NOT USED
A19J40	52	Z-SPARE	NOT USED
A19J40	53	Z-SPARE	NOT USED
A19J40	6	Z-SPARE	NOT USED
A19J40	23	Z-SPARE	NOT USED
A19J40	24	Z-SPARE	NOT USED
A19J40	25	Z-SPARE	NOT USED
A19J40	26	Z-SPARE	NOT USED
A19J40	27	Z-SPARE	NOT USED
A19J40	3	Z-SPARE	NOT USED
A19J40	61	Z-SPARE	NOT USED
A19J40	42	Z-SPARE	NOT USED
A19J40	43	Z-SPARE	NOT USED
A19J40	44	Z-SPARE	NOT USED
A19J40	45	Z-SPARE	NOT USED
A19J40	2	Z-SPARE	NOT USED
A19J40	17	Z-SPARE	NOT USED
A19J40	18	Z-SPARE	NOT USED
A19J41	24	Z-SPARE	NOT USED
A19J41	41	Z-SPARE	NOT USED
A19J41	25	Z-SPARE	NOT USED
A19J41	26	Z-SPARE	NOT USED
A19J41	44	Z-SPARE	NOT USED
A19J41	8	Z-SPARE	NOT USED
A19J41	17	Z-SPARE	NOT USED
A19J41	47	Z-SPARE	NOT USED
A19J41	29	Z-SPARE	NOT USED
A19J41	50	Z-SPARE	NOT USED
A19J41	30	Z-SPARE	NOT USED
A19J41	5	Z-SPARE	NOT USED
A19J41	53	Z-SPARE	NOT USED
A19J41	32	Z-SPARE	NOT USED
A19J41	56	Z-SPARE	NOT USED
A19J41	3	Z-SPARE	NOT USED
A19J41	11	Z-SPARE	NOT USED
A19J41	60	Z-SPARE	NOT USED
A19J41	35	Z-SPARE	NOT USED

A19J41	21	Z-SPARE	NOT USED
A19J41	22	Z-SPARE	NOT USED
A19J41	38	Z-SPARE	NOT USED
A19J41	23	Z-SPARE	NOT USED
A20J41	56	Z-SPARE	NOT USED
A20J41	3	Z-SPARE	NOT USED
A20J41	11	Z-SPARE	NOT USED
A20J41	60	Z-SPARE	NOT USED
A20J41	35	Z-SPARE	NOT USED
A20J41	21	Z-SPARE	NOT USED
A20J41	22	Z-SPARE	NOT USED
A20J41	38	Z-SPARE	NOT USED
A20J41	23	Z-SPARE	NOT USED
A20J41	24	Z-SPARE	NOT USED
A20J41	41	Z-SPARE	NOT USED
A20J41	25	Z-SPARE	NOT USED
A20J41	26	Z-SPARE	NOT USED
A20J41	44	Z-SPARE	NOT USED
A20J41	8	Z-SPARE	NOT USED
A20J41	17	Z-SPARE	NOT USED
A20J41	47	Z-SPARE	NOT USED
A20J41	29	Z-SPARE	NOT USED
A20J41	50	Z-SPARE	NOT USED
A20J41	30	Z-SPARE	NOT USED
A20J41	5	Z-SPARE	NOT USED
A20J41	53	Z-SPARE	NOT USED
A20J41	32	Z-SPARE	NOT USED
A20J42	61	Z-SPARE	
A20J42	24	Z-SPARE	NOT USED
A20J42	47	Z-SPARE	NOT USED
A20J42	30	Z-SPARE	NOT USED
A20J42	39	Z-SPARE	NOT USED
A20J42	21	Z-SPARE	NOT USED
A20J42	15	Z-SPARE	NOT USED
A20J42	33	Z-SPARE	NOT USED
A20J42	27	Z-SPARE	NOT USED
A20J42	18	Z-SPARE	NOT USED
A20J42	36	Z-SPARE	NOT USED
A21J47	46	Z-SPARE	
A21J47	63	Z-SPARE	
A21J47	64	Z-SPARE	
A22J49	81	Z-SPARE	NOT USED
A22J49	82	Z-SPARE	NOT USED
A22J49	83	Z-SPARE	NOT USED
A22J49	84	Z-SPARE	NOT USED
A22J49	87	Z-SPARE	
A22J49	66	Z-SPARE	NOT USED
A22J49	21	Z-SPARE	NOT USED
A22J49	90	Z-SPARE	
A22J49	25	Z-SPARE	OT USED
A22J49	69	Z-SPARE	NOT USED
A22J49	70	Z-SPARE	NOT USED
A22J49	71	Z-SPARE	NOT USED
A22J49	72	Z-SPARE	NOT USED
A22J49	73	Z-SPARE	NOT USED
A22J49	74	Z-SPARE	NOT USED
A22J49	75	Z-SPARE	NOT USED
A22J49	76	Z-SPARE	NOT USED
A22J49	77	Z-SPARE	NOT USED
A22J49	78	Z-SPARE	NOT USED
A22J49	79	Z-SPARE	NOT USED

A22J49	65	Z-SPARE		NOT USED
A22J50	90	Z-SPARE		NOT USED
A22J50	87	Z-SPARE		NOT USED
A23J51	87	Z-SPARE		NOT USED
A23J51	81	Z-SPARE		NOT USED
A23J51	82	Z-SPARE		NOT USED
A23J51	90	Z-SPARE		NOT USED
A23J51	83	Z-SPARE		NOT USED
A23J51	84	Z-SPARE		NOT USED
A23J52	90	Z-SPARE		NOT USED
A23J52	66	Z-SPARE		NOT USED
A23J52	51	Z-SPARE		NOT USED
A23J52	8	Z-SPARE		
A23J52	18	Z-SPARE		NOT USED
A23J52	54	Z-SPARE		NOT USED
A23J52	33	Z-SPARE		NOT USED
A23J52	3	Z-SPARE		NOT USED
A23J52	57	Z-SPARE		NOT USED
A23J52	15	Z-SPARE		NOT USED
A23J52	27	Z-SPARE		NOT USED
A23J52	60	Z-SPARE		NOT USED
A23J52	21	Z-SPARE		NOT USED
A23J52	12	Z-SPARE		NOT USED
A23J52	80	Z-SPARE		NOT USED
A23J52	81	Z-SPARE		NOT USED
A23J52	63	Z-SPARE		NOT USED
A23J52	83	Z-SPARE		NOT USED
A23J52	84	Z-SPARE		NOT USED
A23J52	87	Z-SPARE		NOT USED
A23J52	39	Z-SPARE		NOT USED
A23J52	30	Z-SPARE		NOT USED
A24J53	36	Z-SPARE		NOT USED
A24J53	37	Z-SPARE		NOT USED
A24J53	87	Z-SPARE		NOT USED
A24J53	38	Z-SPARE		NOT USED
A24J53	51	Z-SPARE		NOT USED
A24J53	90	Z-SPARE		NOT USED
A24J53	52	Z-SPARE		NOT USED
A24J53	53	Z-SPARE		NOT USED
A24J53	32	Z-SPARE		NOT USED
A24J54	35	Z-SPARE		
A24J54	16	Z-SPARE		NOT USED
A24J54	90	Z-SPARE		NOT USED
A24J54	39	Z-SPARE		
A24J54	87	Z-SPARE		NOT USED
J09	02	Z SPARE		
A23J52	78	Z SPARE		NOT USED
A15J36	3	100 KHZ		
A16J39	3	100 KHZ		
A21J47	27	100 KHZ		GEN 10
A19J41	7	10 KHZ A		
A21J47	25	10 KHZ A	2	GEN 10
A20J41	7	10 KHZ B		
A21J47	26	10 KHZ B		GEN 10
P01	19	11K BARO SW CLOS		
A15J35	4	11K BARO SW CLOS		
A16J35	4	11K BARO SW CLOS		
A15J35	37	11K BO SW CL RET		NOT WIRED S
A16J35	37	11K BO SW CL RET		
A21J47	44	1 MHZC*		
A21J47	23	1 MHZ*		GEN 10

A24J53	9	1 MHZ*	8	
A24J53	33	1 MHZ*		
A21J47	22	1 MHZ A	8	GEN 30
A24J53	7	1 MHZ A	8	
A21J47	59	1 MHZ B		GEN 10
A24J53	12	1 MHZ B	8	
P10	51	1 MHZ OUT		TEST TOOL
A21J47	24	1 MHZ OUT		GEN 30
P01	18	24K BARO SW CLOS		
A15J35	9	24K BARO SW CLOS		
A16J35	9	24K BARO SW CLOS		
A15J35	34	24K BO SW CL RET		NOT WIRED S
A16J35	34	24K BO SW CL RET		
A20J42	49	8 MHZ		GEN 10
A21J47	21	8 MHZ	2	
P61	40	+12VS-1		
P61	41	+12VS-2		
A13J59	3	+12VS		
A13J59	4	+12VS		
P61	37	+22VS-1		
P61	38	+22VS-2		
A13J59	12	+22VS		
A13J59	34	+22VS		
P61	45	+26VC-1		
P61	46	+26VC-2		
A13J59	1	+26VC		
A13J59	2	+26VC		
A14J33	1	+26VC		MB TRACE
A14J34	2	+26VC		MB TRACE
A14J34	1	+26VC		MB TRACE
A15J36	1	+26VC		MB TRACE
A15J36	2	+26VC		MB TRACE
A16J39	1	+26VC		MB TRACE
A16J39	2	+26VC		MB TRACE
A17J37	2	+26VC		MB TRACE
A17J38	2	+26VC		MB TRACE
A17J38	1	+26VC		MB TRACE
A18J37	2	+26VC		MB TRACE
A18J38	2	+26VC		MB TRACE
A18J38	1	+26VC		MB TRACE
A19J41	2	+26VC		MB TRACE
A19J41	1	+26VC		MB TRACE
A20J41	2	+26VC		MB TRACE
A20J41	1	+26VC		MB TRACE
A20J42	2	+26VC		MB TRACE
A20J42	1	+26VC		MB TRACE
MB2	E 8	+26VC		MB TRACE
P61	43	+26VS-1		
P61	44	+26VS-2		
A13J59	14	+26VS		
A13J59	36	+26VS		
A14J33	60	+26VS		MB TRACE
A14J33	61	+26VS		MB TRACE
A14J34	60	+26VS		MB TRACE
A14J34	61	+26VS		MB TRACE
A15J36	49	+26VS		MB TRACE
A16J39	49	+26VS		MB TRACE
A17J37	49	+26VS		MB TRACE
A17J38	4	+26VS		
A17J38	49	+26VS		MB TRACE
A17J38	6	+26VS		

A18J37	49	+26VS	MB TRACE
A18J38	6	+26VS	
A18J38	4	+26VS	
A18J38	49	+26VS	MB TRACE
A19J41	49	+26VS	MB TRACE
A20J41	49	+26VS	MB TRACE
A20J42	57	+26VS	MB TRACE
A20J42	60	+26VS	
MB2	E 6	+26VS	MB TRACE
P61	1	+5VC-1	
P61	2	+5VC-2	
J09	8	+5VC	
P10	58	+5VC	
A15J36	55	+5VC	MB TRACE
A16J39	55	+5VC	MB TRACE
A18J38	56	+5VC	
A19J41	57	+5VC	
A20J41	57	+5VC	
A20J42	56	+5VC	MB TRACE
A20J42	55	+5VC	MB TRACE
A21J47	86	+5VC	MB TRACE
A21J47	85	+5VC	MB TRACE
A21J50A	86	+5VC	MB TRACE
A21J50A	85	+5VC	MB TRACE
A22J49	85	+5VC	MB TRACE
A22J49	86	+5VC	MB TRACE
A22J50	85	+5VC	MB TRACE
A22J50	86	+5VC	MB TRACE
A23J51	86	+5VC	MB TRACE
A23J51	85	+5VC	MB TRACE
A23J52	86	+5VC	MB TRACE
A23J52	85	+5VC	MB TRACE
A24J54	86	+5VC	MB TRACE
A24J54	85	+5VC	MB TRACE
MB2	E11	+5VC	MB TRACE
P61	3	+5VS-1	
P61	4	+5VS-2	
A13J59	6	+5VS	
A13J59	5	+5VS	
A14J34	3	+5VS	MB TRACE
A14J34	4	+5VS	MB TRACE
A14J34	5	+5VS	MB TRACE
A17J37	55	+5VS	MB TRACE
A17J38	55	+5VS	MB TRACE
A18J37	55	+5VS	MB TRACE
A18J38	55	+5VS	MB TRACE
A19J41	55	+5VS	MB TRACE
A20J41	55	+5VS	MB TRACE
A21J47	92	+5VS	MB TRACE
A21J47	91	+5VS	MB TRACE
A21J50A	92	+5VS	MB TRACE
A21J50A	91	+5VS	MB TRACE
A22J49	91	+5VS	MB TRACE
A22J49	92	+5VS	MB TRACE
A22J50	91	+5VS	MB TRACE
A22J50	92	+5VS	MB TRACE
A23J51	92	+5VS	MB TRACE
A23J51	91	+5VS	MB TRACE
A23J52	92	+5VS	MB TRACE
A23J52	91	+5VS	MB TRACE
A24J53	92	+5VS	MB TRACE

A24J53	85	+5VS	MB TRACF
A24J53	86	+5VS	MB TRACF
A24J53	91	+5VS	MB TRACF
A24J54	92	+5VS	MB TRACF
A24J54	91	+5VS	MB TRACF
MB2	E 4	+5VS	MB TRACF
P61	34	-12VS-1	
P61	35	-12VS-2	
A13J59	33	-12VS	
A13J59	11	-12VS	
P61	13	-6VS-1	
P61	14	-6VS-2	
A13J59	8	-6VS	
A13J59	7	-6VS	
A17J38	46	.5 SFC OUT A	
A22J49	61	.5 SFC OUT A	DISCRETE LOAD
A18J38	46	.5 SFC OUT B	
A23J51	76	.5 SFC OUT B	DISCRETE

Mother Board 1 Listing by Connector

A06J23	A	PPCC-1 SLAVE PWR	MB TRACE
A06J23	B	PPCC-1 MAST PWR	MB TRACE
A06J23	C	PPCC-1 SLAVE PWR	MB TRACE
A06J23	D	PPCC-1 MAST PWR	MB TRACE
A06J23	E	PPCC-3 SLAVE PWR	
A06J23	F	PPCC-3 MAST PWR	
A06J23	G	PAC-1 SLAVE PWR	
A06J23	H	PAC-1 MAST PWR	
A06J23	I	PAC-2 SLAVE PWR	
A06J23	J	PAC-2 MAST PWR	
A06J23	K	GND 5	MB TRACE
A06J23	L	GND 5	MB TRACE
A06J23	M	PFC 26	OUTPUT
A06J23	N	PFC 26-T	OUTPUT
A06J23	O	PFC-3	OUTPUT
A06J23	P	PFC-3-T	OUTPUT
A06J23	Q	PFC-27	OUTPUT
A06J23	R	PFC-27-T	OUTPUT
A06J23	S	PFC-1	OUTPUT
A06J23	T	PFC-1-T	OUTPUT
A06J23	U	PFC-2	OUTPUT
A06J23	V	PFC-2-T	OUTPUT
A06J23	W	ADDRESS 40A	MB TRACE
A06J23	X	ADDRESS 40A	MB TRACE
A06J23	Z	ADDRESS 3A	
A06J23	2A	ADDRESS 4A	
A06J23	2B	ADDRESS 5A	
A06J23	2C	ADDRESS 2A	
A06J23	2E	ADDRESS 40B	MB TRACE
A06J23	2F	ADDRESS 40B	MB TRACE
A06J23	2H	ADDRESS 3B	
A06J23	2I	ADDRESS 4B	
A06J23	2J	ADDRESS 5B	
A06J23	2K	ADDRESS 2B	
A06J23	2L	TEL RET 2	MB TRACE
A06J23	2N	RESET 6	MB TRACE
A06J23	2O	RESET 7	MB TRACE
A06J24	A	PPCC-6 SLAVE PWR	MB TRACE
A06J24	B	PPCC-6 MAST PWR	MB TRACE
A06J24	C	PPCC-6 SLAVE PWR	MB TRACE
A06J24	D	PPCC-6 MAST PWR	MB TRACE
A06J24	E	PPCC-6 SLAVE PWR	MB TRACE
A06J24	F	PPCC-6 MAST PWR	MB TRACE
A06J24	G	PPCC-6 SLAVE PWR	MB TRACE
A06J24	H	PPCC-6 MAST PWR	MB TRACE
A06J24	I	PPCC-4 SLAVE PWR	
A06J24	J	PPCC-4 MAST PWR	
A06J24	K	GND 5	MB TRACE
A06J24	L	GND 5	MB TRACE
A06J24	M	PFC-24	OUTPUT
A06J24	N	PFC-24-T	OUTPUT
A06J24	O	PFC-28	
A06J24	P	PFC-28-T	OUTPUT
A06J24	Q	PFC-25	OUTPUT
A06J24	R	PFC-25-T	OUTPUT
A06J24	S	PFC-4	OUTPUT
A06J24	T	PFC-4-T	OUTPUT
A06J24	U	PFC-5	OUTPUT
A06J24	V	PFC-5-T	OUTPUT
A06J24	W	ADDRESS 20A	MB TRACE
A06J24	Y	ADDRESS 20A	MB TRACE
A06J24	2A	ADDRESS 3A	

A06J24 2B	ADDRESS 4A	
A06J24 2C	ADDRESS 2A	
A06J24 2E	ADDRESS 20B	MB TRACE
A06J24 2F	LAND SW CL	INPUT
A06J24 2G	ADDRESS 20B	MB TRACE
A06J24 2I	ADDRESS 3B	
A06J24 2J	ADDRESS 4B	
A06J24 2K	ADDRESS 2B	
A06J24 2L	TEL RET 2	MB TRACE
A06J24 2N	RESET 5	MB TRACE
A06J24 2O	RESET 6	MB TRACE
A07J23A A	PPCC-5 SLAVE PWR	MB TRACE
A07J23A B	PPCC-5 MAST PWR	MB TRACE
A07J23A C	PPCC-5 SLAVE PWR	MB TRACE
A07J23A D	PPCC-5 MAST PWR	MB TRACE
A07J23A E	PPCC-5 SLAVE PWR	MB TRACE
A07J23A F	PPCC-5 MAST PWR	MB TRACE
A07J23A G	PAC-5 SLAVE PWR	
A07J23A H	PAC-5 MAST PWR	
A07J23A I	PAC-6 SLAVE PWR	
A07J23A J	PAC-6 MAST PWR	
A07J23A K	GND 5	MB TRACE
A07J23A L	GND 5	MB TRACE
A07J23A M	PFC-19	OUTPUT
A07J23A N	PFC-19-T	OUTPUT
A07J23A O	PFC-20	OUTPUT
A07J23A P	PFC-20-T	OUTPUT
A07J23A Q	PFC-23	OUTPUT
A07J23A R	PFC-23-T	OUTPUT
A07J23A S	PFC-9	OUTPUT
A07J23A T	PFC-9-T	OUTPUT
A07J23A U	PFC-10	OUTPUT
A07J23A V	PFC-10-T	OUTPUT
A07J23A W	ADDRESS 30A	MB TRACE
A07J23A X	ADDRESS 30A	MB TRACE
A07J23A Z	ADDRESS 3A	
A07J23A2A	ADDRESS 4A	
A07J23A2B	ADDRESS 5A	
A07J23A2C	ADDRESS 2A	MB TRACE
A07J23A2E	ADDRESS 30B	MB TRACE
A07J23A2F	ADDRESS 30B	INPUT
A07J23A2H	ADDRESS 3B	
A07J23A2I	ADDRESS 4B	
A07J23A2J	ADDRESS 5B	
A07J23A2K	ADDRESS 2B	MB TRACE
A07J23A2L	TEL RET 2	MB TRACE
A07J23A2N	RESET 7	MB TRACE
A07J23A2O	RESET 8	MB TRACE
A07J24A A	PPCC-2 SLAVE PWR	MB TRACE
A07J24A B	PPCC-2 MAST PWR	MB TRACE
A07J24A C	PPCC-3 SLAVE PWR	MB TRACE
A07J24A D	PPCC-3 MAST PWR	MB TRACE
A07J24A E	PPCC-3 SLAVE PWR	MB TRACE
A07J24A F	PPCC-3 MAST PWR	MB TRACE
A07J24A G	PPCC-2 SLAVE PWR	MB TRACE
A07J24A H	PPCC-2 MAST PWR	MB TRACE
A07J24A I	PPCC-3 SLAVE PWR	MB TRACE
A07J24A J	PPCC-3 MAST PWR	MB TRACE
A07J24A K	GND 5	MB TRACE
A07J24A L	GND 5	MB TRACE
A07J24A M	PFC-6	OUTPUT
A07J24A N	PFC-6-T	OUTPUT

A07J24A O	PFC-12	OUTPUT
A07J24A P	PFC-12-T	OUTPUT
A07J24A Q	PFC-7	OUTPUT
A07J24A R	PFC-7-T	OUTPUT
A07J24A S	PFC-16	OUTPUT
A07J24A T	PFC-16-T	OUTPUT
A07J24A U	PFC-17	OUTPUT
A07J24A V	PFC-17-T	OUTPUT
A07J24A X	ADDRESS 10A	MB TRACE
A07J24A Y	ADDRESS 10A	MB TRACE
A07J24A2A	ADDRESS 0A	
A07J24A2B	ADDRESS 3A	
A07J24A2C	ADDRESS 1A	
A07J24A2E	ADDRESS 10B	MB TRACE
A07J24A2F	ADDRESS 10B	MB TRACE
A07J24A2G	ADDRESS 10B	MB TRACE
A07J24A2I	ADDRESS 0B	
A07J24A2J	ADDRESS 3B	
A07J24A2K	ADDRESS 1B	
A07J24A2L	TEL RET 2	MB TRACE
A07J24A2N	RESET 4	MB TRACE
A07J24A2O	RESET 5	MB TRACE
A08J23B A	PPCC-2 SLAVE PWR	MB TRACE
A08J23B B	PPCC-2 MAST PWR	MB TRACE
A08J23B C	PPCC-2 SLAVE PWR	MB TRACE
A08J23B D	PPCC-2 MAST PWR	MB TRACE
A08J23B E	PPCC-2 SLAVE PWR	MB TRACE
A08J23B F	PPCC-2 MAST PWR	MB TRACE
A08J23B G	PPCC-4 SLAVE PWR	
A08J23B H	PPCC-4 MAST PWR	
A08J23B K	GND 5	MB TRACE
A08J23B L	GND 5	MB TRACE
A08J23B M	PFC-11	OUTPUT
A08J23B N	PFC-11-T	OUTPUT
A08J23B O	PFC-15	OUTPUT
A08J23B P	PFC-15-T	OUTPUT
A08J23B Q	PFC-18	OUTPUT
A08J23B R	PFC-18-T	OUTPUT
A08J23B S	PFC-8	OUTPUT
A08J23B T	PFC-8-T	OUTPUT
A08J23B W	ADDRESS 10A	
A08J23B X	ADDRESS 30A	INPUT
A08J23B Z	ADDRESS 2A	MB TRACE
A08J23B2A	ADDRESS 6A	MB TRACE
A08J23B2B	ADDRESS 7A	
A08J23B2C	ADDRESS 6A	MB TRACE
A08J23B2E	ADDRESS 10B	
A08J23B2F	ADDRESS 30B	MB TRACE
A08J23B2H	ADDRESS 2B	MB TRACE
A08J23B2I	ADDRESS 6B	MB TRACE
A08J23B2J	ADDRESS 7B	
A08J23B2K	ADDRESS 6B	MB TRACE
A08J23B2L	TEL RET 2	MB TRACE
A08J23B2N	RESET 8	MB TRACE OUTPUT
A08J23B2O	RESET 9	MB TRACE
A08J24B A	PPCC-3 SLAVE PWR	MB TRACE
A08J24B B	PPCC-3 MAST PWR	MB TRACE
A08J24B E	PPCC-2 SLAVE PWR	MB TRACE
A08J24B F	PPCC-2 MAST PWR	MB TRACE
A08J24B G	PPCC-3 SLAVE PWR	MB TRACE
A08J24B H	PPCC-3 MAST PWR	MB TRACE
A08J24B I	PPCC-2 SLAVE PWR	MB TRACE

A08J24B	J	PPCC-2 MAST PWR	MB TRACE
A08J24B	K	GND 5	MB TRACE
A08J24B	L	GND 5	MB TRACE
A08J24B	M	PFC-14	OUTPUT
A08J24B	N	PFC-14-T	OUTPUT
A08J24B	Q	PFC-13	OUTPUT
A08J24B	R	PFC-13-T	OUTPUT
A08J24B	S	PFC-22	OUTPUT
A08J24B	T	PFC-22-T	OUTPUT
A08J24B	U	PFC-21	OUTPUT
A08J24B	V	PFC-21-T	OUTPUT
A08J24B	W	ADDRESS 10A	MB TRACE
A08J24B	Y	ADDRESS 10A	MB TRACE
A08J24B2A		ADDRESS 4A	
A08J24B2C		ADDRESS 5A	
A08J24B2E		ADDRESS 10B	MB TRACE
A08J24B2G		ADDRESS 10B	MB TRACE
A08J24B2I		ADDRESS 4B	
A08J24B2K		ADDRESS 5B	
A08J24B2L		TEL RET 2	MB TRACE
A08J24B2N		RESET 3	MB TRACE
A08J24B2O		RESET 4	MB TRACE
A09J25	A	LOGIC BUSS	MB TRACE
A09J25	B	LOGIC BUSS	MB TRACE
A09J25	C	PWR UP RESET A2	MB TRACE
A09J25	D	PWR UP RESET A1	
A09J25	E	PWR UP RESET B2	MB TRACE
A09J25	F	PWR UP RESET B1	
A09J25	G	MAN RESET 3	MB TRACE
A09J25	H	MAN RESET 2	
A09J25	I	ADDRESS 1A	
A09J25	L	ADDRESS 60A	
A09J25	O	ADDRESS 4A	
A09J25	R	ADDRESS 00A	
A09J25	S	ADDRESS 1B	
A09J25	T	INPUT 100MA 1A	
A09J25	U	INPUT 100MA 2B	OUTPUT
A09J25	V	INPUT 100MA 1B	
A09J25	W	INPUT 100MA 2A	OUTPUT
A09J25	X	ADDRESS 60B	
A09J25	2A	ADDRESS 4B	
A09J25	2D	ADDRESS 00B	
A09J25	2E	TEL RET 1	
A09J25	2F	BECO	OUTPUT
A09J25	2G	BECO-T	OUTPUT
A09J25	2H	RESET EV TM	OUTPUT
A09J25	2I	LES ABORT EN-T	OUTPUT
A09J25	2J	LES ABORT ENABLE	OUTPUT
A09J25	2K	RESET EV TM-T	OUTPUT
A09J25	2O	GND 4	MB TRACE
A09J25	2N	GND 4	MB TRACE
A09J26	A	LOGIC BUSS	MB TRACE
A09J26	B	LOGIC BUSS	MB TRACE
A09J26	C	PWR UP RESET A1	INPUT
A09J26	D	+26VC	MB TRACE
A09J26	E	PWR UP RESET B1	INPUT
A09J26	F	+26VC	MB TRACE
A09J26	G	MAN RESET 2	
A09J26	H	MAN RESET 1	INPUT
A09J26	I	ACT 11K BAROSW-T	OUTPUT
A09J26	K	EN ELS BUS-T	OUTPUT
A09J26	M	TM RET 1	

A09J26	N	ADDRESS 60A	
A09J26	O	ADDRESS 50A	
A09J26	P	ADDRESS 0A	
A09J26	Q	ADDRESS 6A	
A09J26	R	ADDRESS 60B	
A09J26	S	ADDRESS 50B	
A09J26	T	ADDRESS 0B	
A09J26	U	ADDRESS 6B	
A09J26	Y	ADDRESS 00A	
A09J26	Z	INPUT 100MA 3A	
A09J26	2A	ADDRESS 3A	
A09J26	2B	INPUT 100MA 3B	
A09J26	2C	ADDRESS 1A	
A09J26	2D	INPUT 100MA 4A	
A09J26	2E	INPUT 100MA 4B	
A09J26	2F	INPUT 100MA 4B	TEST PT
A09J26	2G	ADDRESS 00B	
A09J26	2H	EN ELS BUS	OUTPUT
A09J26	2I	ADDRESS 3B	
A09J26	2J	ACT 11K BARO 5W	OUTPUT
A09J26	2K	ADDRESS 1B	
A09J26	2N	GND 4	MB TRACE
A09J26	2O	GND 4	MB TRACE
A09J26	Q	ADDRESS 6A	MB TRACE
A10J27	A	LOGIC BUSS	MB TRACE
A10J27	B	LOGIC BUSS	MB TRACE
A10J27	C	PWR UP RESET A3	MB TRACE
A10J27	D	PWR UP RESET A2	MB TRACE
A10J27	E	PWR UP RESET B3	MB TRACE
A10J27	F	PWR UP RESET B2	MB TRACE
A10J27	G	MAN RESET 4	MB TRACE
A10J27	H	MAN RESET 3	MB TRACE
A10J27	I	ADDRESS 2A	
A10J27	J	ADDRESS 3A	
A10J27	K	ADDRESS 6A	OUTPUT
A10J27	L	ADDRESS 60A	MB TRACE
A10J27	M	ADDRESS 60A	MB TRACE
A10J27	N	ADDRESS 60A	MB TRACE
A10J27	O	ADDRESS 4A	MB TRACE
A10J27	P	ADDRESS 5A	
A10J27	Q	ADDRESS 4A	MB TRACE
A10J27	R	ADDRESS 50A	MB TRACE
A10J27	S	ADDRESS 50A	MB TRACE
A10J27	T	ADDRESS 70A	
A10J27	U	ADDRESS 2B	
A10J27	V	ADDRESS 3B	
A10J27	W	ADDRESS 6B	OUTPUT
A10J27	X	ADDRESS 60B	MB TRACE
A10J27	Y	ADDRESS 60B	MB TRACE
A10J27	Z	ADDRESS 60B	MB TRACE
A10J27	2A	ADDRESS 4B	MB TRACE
A10J27	2B	ADDRESS 5B	
A10J27	2C	ADDRESS 4B	MB TRACE
A10J27	2D	ADDRESS 50B	MB TRACE
A10J27	2E	ADDRESS 50B	MB TRACE
A10J27	2F	ADDRESS 70B	
A10J27	2G	INPUT SD1A	INPUT
A10J27	2H	INPUT SD1B	INPUT
A10J27	2I	INPUT SD2B	INPUT
A10J27	2J	INPUT SD2A	INPUT
A10J27	2K	INPUT SD 3B,4B	INPUT
A10J27	2L	INPUT SD 3A,4A	INPUT

A10J27	2N	GND 4	MB TRACE
A10J27	2O	GND 4	MB TRACE
A11J27	A	LOGIC BUSS	MB TRACE
A11J27	B	LOGIC BUSS	MB TRACE
A11J27	C	PWR UP RESET A4	MB TRACE
A11J27	D	PWR UP RESET A3	MB TRACE
A11J27	E.	PWR UP RESET B4	MB TRACE
A11J27	F	PWR UP RESET B3	MB TRACE
A11J27	G	MAN RESET 5	MB TRACE
A11J27	H	MAN RESET 4	MB TRACE
A11J27	I	ADDRESS 7A	MB TRACE
A11J27	J	ADDRESS 7A	MB TRACE
A11J27	K	ADDRESS 5A	
A11J27	L	ADDRESS 50A	MB TRACE
A11J27	M	ADDRESS 20A	MB TRACE
A11J27	N	ADDRESS 20A	MB TRACE
A11J27	O	ADDRESS 2A	OUTPUT
A11J27	P	ADDRESS 0A	MB TRACE
A11J27	Q	ADDRESS 0A	MB TRACE
A11J27	R	ADDRESS 00A	
A11J27	S	ADDRESS 40A	INPUT
A11J27	T	ADDRESS 30A	
A11J27	U	ADDRESS 7B	MB TRACE
A11J27	V	ADDRESS 7B	MB TRACE
A11J27	W	ADDRESS 5B	MB TRACE
A11J27	X	ADDRESS 50B	MB TRACE
A11J27	Y	ADDRESS 20B	MB TRACE
A11J27	Z	ADDRESS 20B	MB TRACE
A11J27	2A	ADDRESS 2B	OUTPUT
A11J27	2B	ADDRESS 0B	MB TRACE
A11J27	2C	ADDRESS 0B	MB TRACE
A11J27	2D	ADDRESS 00B	
A11J27	2E	ADDRESS 40B	INPUT
A11J27	2F	ADDRESS 30B	
A11J27	2G	INPUT 100MA 2A	
A11J27	2H	INPUT 100MA 2B	
A11J27	2I	INPUT PAC 1B,2B	
A11J27	2J	INPUT PAC 1A,2A	
A11J27	2K	INPUT PAC 5B,6B	
A11J27	2L	INPUT PAC 5A,6A	
A11J27	2N	GND 4	MB TRACE
A11J27	2O	GND 4	MB TRACE
A12J27	A	LOGIC BUSS	MB TRACE
A12J27	B	LOGIC BUSS	MB TRACE
A12J27	C	PWR UP RESET A5	OUTPUT
A12J27	D	PWR UP RESET A4	MB TRACE
A12J27	E	PWR UP RESET B5	OUTPUT
A12J27	F	PWR UP RESET B4	MB TRACE
A12J27	G	MAN RESET 6	OUTPUT
A12J27	H	MAN RESET 5	MB TRACE
A12J27	I	ADDRESS 7A	OUTPUT
A12J27	J	ADDRESS 0A	OUTPUT
A12J27	K	ADDRESS 4A	OUTPUT
A12J27	L	ADDRESS 70A	
A12J27	M	ADDRESS 50A	INPUT
A12J27	N	ADDRESS 60A	INPUT
A12J27	O	ADDRESS 0A	
A12J27	P	ADDRESS 5A	MB TRACE
A12J27	Q	ADDRESS 5A	MB TRACE
A12J27	R	ADDRESS 00A	INPUT
A12J27	S	ADDRESS 70A	INPUT
A12J27	T	ADDRESS 00A	MB TRACE

A12J27	V	ADDRESS 0B	OUTPUT
A12J27	W	ADDRESS 4B	OUTPUT
A12J27	X	ADDRESS 70B	
A12J27	Y	ADDRESS 50B	INPUT
A12J27	Z	ADDRESS 60B	INPUT
A12J27	2A	ADDRESS 0B	
A12J27	2B	ADDRESS 5B	MB TRACE
A12J27	2C	ADDRESS 5B	MB TRACE
A12J27	2D	ADDRESS 00B	MB TRACE
A12J27	2E	ADDRESS 70B	INPUT
A12J27	2F	ADDRESS 00B	MB TRACE
A12J27	2G	GOA	OUTPUT
A12J27	2H	GOB	OUTPUT
A12J27	2I	INPUT 0.5A SW2B	OUTPUT
A12J27	2J	INPUT 0.5A SW2A	OUTPUT
A12J27	2K	INPUT 0.5A SW1B	OUTPUT
A12J27	2L	INPUT 0.5A SW1A	OUTPUT
A12J27	2N	GND 4	MB TRACE
A12J27	2O	GND 4	MB TRACE
A12J27	U	ADDRESS 7B	OUTPUT
A10J28	A	LOGIC BUSS	MB TRACE
A10J28	B	LOGIC BUSS	MB TRACE
A10J28	C	CL OX ISOL VAL-1	
A10J28	D	CL OX ISOL VAL-T	
A10J28	E	INPUT MSD 1A	
A10J28	F	INPUT MSD 1B	
A10J28	G	CL FL ISOL VAL-1	
A10J28	H	CL FL ISOL VAL-T	
A10J28	I	SM X JETS 1-1	
A10J28	J	SM X JETS 1-T	
A10J28	K	SM X JETS 2-1	
A10J28	L	SM X JETS 2-T	
A10J28	M	CM-SM PWR XFER-1	
A10J28	N	CM-SM PWR XFER-T	
A10J28	O	CM-SM RCS XFER-1	
A10J28	P	CM-SM RCS XFER-T	
A10J28	Q	ENABLE CM RCS-1	
A10J28	R	ENABLE CM RCS-T	
A10J28	S	ENABLE SM RCS-1	
A10J28	T	ENABLE SM RCS-T	
A10J28	U	TEL RET 1	
A10J28	2B	ADDRESS 50A	
A10J28	2C	ADDRESS 3A	
A10J28	2H	ADDRESS 50B	
A10J28	2K	ADDRESS 3B	
A10J28	2L	RESET 2	MB TRACE
A10J28	2M	RESET 3	INPUT
A10J28	2N	GND 4	
A10J28	2O	GND 4	
A11J29	A	LOGIC BUSS	MB TRACE
A11J29	B	LOGIC BUSS	MB TRACE
A11J29	E	T 42SEC B	OUTPUT
A11J29	F	T 42SEC A	OUTPUT
A11J29	G	INPUT MSD 2B	OUTPUT
A11J29	H	INPUT MSD 2A	OUTPUT
A11J29	I	INITIATE SMJC B	OUTPUT
A11J29	J	INITIATE SMJC A	OUTPUT
A11J29	Z	ADDRESS 70A	MB TRACE
A11J29	2A	ADDRESS 00A	
A11J29	2B	ADDRESS 70A	MB TRACE
A11J29	2C	ADDRESS 3A	OUTPUT
A11J29	2D	ADDRESS 7A	OUTPUT

A11J29	2E	ADDRESS 1A	
A11J29	2F	ADDRESS 70B	MB TRACE
A11J29	2G	ADDRESS 00B	
A11J29	2H	ADDRESS 70B	MB TRACE
A11J29	2I	ADDRESS 3B	OUTPUT
A11J29	2J	ADDRESS 7B	OUTPUT
A11J29	2K	ADDRESS 1B	MB TRACE
A11J29	2L	RESET 1	28V
A11J29	2M	RESET 2	MB TRACE
A11J29	2N	GND 4	MB TRACE
A11J29	2O	GND 4	MB TRACE
A12J30	A	LOGIC BUSS	MB TRACE
A12J30	B	LOGIC BUSS	MB TRACE
A12J30	C	RESET ELB 1B	
A12J30	F	RESET ELB 1A	
A12J30	G	RESET ELB 2A	
A12J30	H	RESET ELB 2B	
A12J30	I	RESET ELB 2A IND	
A12J30	J	RESET ELB 1A IND	
A12J30	K	RESET ELB 2B IND	
A12J30	L	RESET ELB 1B IND	
A12J30	2A	ADDRESS 20A	
A12J30	2C	ADDRESS 6A	
A12J30	2E	ADDRESS 1A	
A12J30	2G	ADDRESS 20B	
A12J30	2I	ADDRESS 6B	
A12J30	2K	ADDRESS 1B	
A12J30	2L	LOGIC BUSS	MB TRACE+26VC
A12J30	2M	RESET 1	
A12J30	2N	GND 4	MB TRACE
A12J30	2O	GND 4	MB TRACE
MB1	E 1	PPCC-3 SLAVE PWR	OUTPUT
MB1	E 2	PPCC-2 SLAVE PWR	OUTPUT
MB1	E 3	GND 5	
MB1	E 4	PFC-14	OUTPUT
MB1	E 5	PFC-13	OUTPUT
MB1	E 6	PFC-22	OUTPUT
MB1	E 7	PFC-21	OUTPUT
MB1	E 8	PPCC-2 SLAVE PWR	OUTPUT
MB1	E 9	PPCC-3 SLAVE PWR	OUTPUT
MB1	E10	GND 5	
MB1	E11	PFC-6	OUTPUT
MB1	E12	PFC-12	OUTPUT
MB1	E13	PFC-7	OUTPUT
MB1	E14	PFC-16	OUTPUT
MB1	E15	PFC-17	OUTPUT
MB1	E16	PPCC-6 SLAVE PWR	
MB1	E17	PPCC-4 SLAVE PWR	
MB1	E18	GND 5	OUTPUT
MB1	E19	PFC-24	OUTPUT
MB1	E20	PFC-28	OUTPUT
MB1	E21	PFC-25	OUTPUT
MB1	E22	PFC-4	OUTPUT
MB1	E23	PFC-5	OUTPUT
MB1	E24	LOGIC BUSS	MB TRACE
MB1	E25	LOGIC BUSS	MB TRACE
MB1	E26	TEL RET 2	MB TRACE
MB1	E27	TEL RET 2	MB TRACE
MB1	E28	GND 4	MB TRACE
MB1	E29	GND 4	MB TRACE
MB1	E30	PFC-8	OUTPUT
MB1	E31	PFC-18	OUTPUT

MB1	E32	PFC-15	OUTPUT
MB1	E33	PFC-11	OUTPUT
MB1	E34	GND 5	
MB1	E35	PPCC-4 SLAVE PWR	OUTPUT
MB1	E36	PPCC-2 SLAVE PWR	OUTPUT
MB1	E37	PFC-10	OUTPUT
MB1	E38	PFC-9	OUTPUT
MB1	E39	PFC-23	OUTPUT
MB1	E40	PFC-20	OUTPUT
MB1	E41	PFC-19	OUTPUT
MB1	E42	GND 5	
MB1	E43	PAC-6 SLAVE PWR	OUTPUT
MB1	E44	PAC-5 SLAVE PWR	OUTPUT
MB1	E45	PPCC-5 SLAVE PWR	OUTPUT
MB1	E46	PFC-2	OUTPUT
MB1	E47	PFC-1	OUTPUT
MB1	E48	PFC-27	OUTPUT
MB1	E49	PFC-3	OUTPUT
MB1	E50	PFC-26	OUTPUT
MB1	E51	GND 5	OUTPUT
MB1	E52	PAC-2 SLAVE PWR	OUTPUT
MB1	E53	PAC-1 SLAVE PWR	OUTPUT
MB1	E54	PPCC-3 SLAVE PWR	OUTPUT
MB1	E55	PPCC-1 SLAVE PWR	OUTPUT

4392 001774 CARDS READ OUTPUT

Mother Board 2 Listing by Connector

A13J59	1	+26VC
A13J59	2	+26VC
A13J59	3	+12VS
A13J59	4	+12VS
A13J59	5	+5VS
A13J59	6	+5VS
A13J59	7	-6VS
A13J59	8	-6VS
A13J59	11	-12VS
A13J59	12	+22VS
A13J59	14	+26VS
A13J59	19	CLAMP
A13J59	27	T C FAULT (L)
A13J59	29	GND 1
A13J59	30	GND 1
A13J59	33	-12VS
A13J59	34	+22VS
A13J59	36	+26VS
A13J59	37	GND 2
A13J59	38	GND 2
A13J59	50	CLAMP FAULT
A13J60	1	AR1
A13J60	2	AR2
A13J60	3	AR3
A13J60	4	AR4
A13J60	5	AR5
A13J60	6	AR6
A13J60	7	AR7
A13J60	8	AR8
A13J60	9	AR9
A13J60	10	MR0
A13J60	11	MR1
A13J60	12	MR2
A13J60	13	MR3
A13J60	14	MR4
A13J60	15	MR5
A13J60	16	MR6
A13J60	17	MR7
A13J60	18	AR1*
A13J60	19	AR2*
A13J60	20	AR3*
A13J60	21	AR4*
A13J60	22	AR5*
A13J60	23	AR6*
A13J60	24	AR7*
A13J60	25	AR8*
A13J60	26	AR9*
A13J60	27	SHIELD
A13J60	28	SA0
A13J60	29	SA1
A13J60	30	SA2
A13J60	31	SA3
A13J60	32	SA4
A13J60	33	SA5
A13J60	34	AR0
A13J60	35	AR0*
A13J60	36	C/W(L)
A13J60	37	R/R(L)
A13J60	38	MR8
A13J60	39	MR9
A13J60	40	MR10
A13J60	41	MR11

A13J60	44	SHIFLD	
A13J60	45	SA6	
A13J60	46	SA7	
A13J60	47	SA8	
A13J60	48	SA9	
A13J60	49	SA10	
A13J60	50	SA11	
A14J33	1	+26VC	MB TRACE
A14J33	2	Z-SPARE	NOT USED
A14J33	3	Z-SPARE	NOT USED
A14J33	4	SET CMD BIT 2-1A	
A14J33	5	SET CMD BIT 2-0A	
A14J33	6	SET CMD BIT 1-1A	
A14J33	7	SET CMD BIT 1-0A	
A14J33	8	SET CMD BIT 0-1A	
A14J33	9	SET CMD BIT 0-0A	
A14J33	10	ADDRESS 00A	
A14J33	11	ADDRESS 10A	
A14J33	12	ADDRESS 20A	
A14J33	13	ADDRESS 30A	
A14J33	14	ADDRESS 40A	
A14J33	15	ADDRESS 50A	
A14J33	16	ADDRESS 60A	
A14J33	17	ADDRESS 70A	
A14J33	18	PWR UP RESET A5	
A14J33	19	CMD EXECUTE A	
A14J33	20	ADDRESS 0A	
A14J33	21	ADDRESS 1A	
A14J33	22	ADDRESS 2A	
A14J33	23	ADDRESS 3A	
A14J33	24	ADDRESS 4A	
A14J33	25	ADDRESS 5A	
A14J33	26	ADDRESS 6A	
A14J33	27	ADDRESS 7A	
A14J33	28	SET CMD BIT 5-1A	
A14J33	29	SET CMD BIT 5-0A	
A14J33	30	SET CMD BIT 4-1A	
A14J33	31	SET CMD BIT 4-0A	
A14J33	32	SET CMD BIT 3-1A	
A14J33	33	SET CMD BIT 3-0A	
A14J33	34	PWR UP (V) A	
A14J33	35	PWR DOWN A5	
A14J33	36	PWR DOWN A4	
A14J33	37	PWR UP INT 1A	
A14J33	38	Z-SPARE	NOT USED
A14J33	39	PWR UP INT 2A	
A14J33	40	Z-SPARE	NOT USED
A14J33	41	Z-SPARE	NOT USED
A14J33	42	Z-SPARE	NOT USED
A14J33	43	Z-SPARE	NOT USED
A14J33	44	Z-SPARE	NOT USED
A14J33	45	Z-SPARE	NOT USED
A14J33	46	Z-SPARE	NOT USED
A14J33	47	Z-SPARE	NOT USED
A14J33	48	Z-SPARE	NOT USED
A14J33	49	Z-SPARE	NOT USED
A14J33	50	Z-SPARE	NOT USED
A14J33	51	Z-SPARE	NOT USED
A14J33	52	Z-SPARE	NOT USED
A14J33	53	Z-SPARE	NOT USED
A14J33	54	Z-SPARE	NOT USED
A14J33	55	GND 1	MB TRACE

A14J33	56	Z-SPARE	NOT USED
A14J33	57	Z-SPARE	NOT USED
A14J33	58	GND 3A	MB TRACE
A14J33	59	Z-SPARE	NOT USED
A14J33	60	+26VS	MB TRACE
A14J33	61	+26VS	MB TRACE
A14J34	1	+26VC	MB TRACE
A14J34	2	+26VC	MB TRACE
A14J34	3	+5VS	MB TRACE
A14J34	4	+5VS	MB TRACE
A14J34	5	+5VS	MB TRACE
A14J34	6	GND 1	MB TRACE
A14J34	7	GND 1	MB TRACE
A14J34	8	GND 1	MB TRACE
A14J34	9	LOGIC BUSS	MB TRACE
A14J34	10	Z-SPARE	NOT USED
A14J34	11	LOGIC BUSS	MB TRACE
A14J34	12	OS RESET INCL	
A14J34	13	SET CMD BIT 2-1B	
A14J34	14	SET CMD BIT 2-0B	
A14J34	15	SET CMD BIT 1-1B	
A14J34	16	SET CMD BIT 1-0B	
A14J34	17	SET CMD BIT 0-1B	
A14J34	18	SET CMD BIT 0-0B	
A14J34	19	ADDRESS 00B	
A14J34	20	ADDRESS 10B	
A14J34	21	ADDRESS 20B	
A14J34	22	ADDRESS 30B	
A14J34	23	ADDRESS 40B	
A14J34	24	ADDRESS 50B	
A14J34	25	ADDRESS 60B	
A14J34	26	ADDRESS 70B	
A14J34	27	PWR UP RESET B5	
A14J34	28	RESET 9	
A14J34	29	ADDRESS 0B	
A14J34	30	ADDRESS 1B	
A14J34	31	ADDRESS 2B	
A14J34	32	ADDRESS 3B	
A14J34	33	ADDRESS 4B	
A14J34	34	ADDRESS 5B	
A14J34	35	ADDRESS 6B	
A14J34	36	ADDRESS 7B	
A14J34	37	SET CMD BIT 5-1B	
A14J34	38	SET CMD BIT 5-0B	
A14J34	39	SET CMD BIT 4-1B	
A14J34	40	SET CMD BIT 4-0B	
A14J34	41	SET CMD BIT 3-1B	
A14J34	42	SET CMD BIT 3-0B	
A14J34	43	PWR UP (V) B	
A14J34	44	Z-SPARE	NOT USED
A14J34	45	CMD EXECUTE B	
A14J34	46	CLEAR SYSTEM (V)	
A14J34	47	RESET ELB 2B IND	
A14J34	48	RESET ELB 1B IND	
A14J34	49	PWR DOWN B4	
A14J34	50	PWR UP INT 1B	
A14J34	51	PWR DOWN B5	
A14J34	52	PWR UP INT 2B	
A14J34	53	CLEAR ELB 2A	
A14J34	54	CLEAR ELB 2B	
A14J34	55	CLEAR BAR 2A RET	
A14J34	56	CLEAR BAR 2B RET	

A14J34	57	GND 4	MB TRACE
A14J34	58	GND 3B	MB TRACE
A14J34	59	GND 4	MB TRACE
A14J34	60	+26VS	MB TRACE
A14J34	61	+26VS	MB TRACE
A15J35	1	Z-SPARE	NOT USED
A15J35	2	Z-SPARE	NOT USED
A15J35	3	PWR DOWN B5	TO E13 A15J36
A15J35	4	11K BARO SW CLOS	
A15J35	5	LIFTOFF	
A15J35	6	ET OFF	
A15J35	7	SPARE OUT 1A	
A15J35	8	EDS ABT STG 3	
A15J35	9	24K BARO SW CLOS	
A15J35	10	SPARE OUT 2A	
A15J35	11	EDS ABT STG 2	
A15J35	12	Z-SPARE	NOT USED
A15J35	13	OX DUMP ENABL RET	NOT WIRED S
A15J35	14	EDS ABT STG 1	
A15J35	15	Z-SPARE	NOT USED
A15J35	16	AUTO ABT ENA RET	
A15J35	17	AUTO ABT ENABLE	
A15J35	18	Z-SPARE	NOT USED
A15J35	19	EDS ABT STG1 RET	NOT WIRED S
A15J35	20	OX DMP ENABLE	
A15J35	21	Z-SPARE	NOT USED
A15J35	22	EDS ABT STG2 RET	NOT WIRED S
A15J35	23	OUT SW RESET RET	
A15J35	24	Z-SPARE	NOT USED
A15J35	25	EDS ABT STG3 RET	NOT WIRED S
A15J35	26	OUTPUT SW RESET	
A15J35	27	PWR UP INT 2A	USED ON A15 ONLY
A15J35	28	LIFTOFF RET	
A15J35	29	TEST SW OFF RET	
A15J35	30	Z-SPARE	NOT USED
A15J35	31	ET OFF RET	
A15J35	32	TEST SW OFF	
A15J35	33	Z-SPARE	NOT USED
A15J35	34	24K BO SW CL RET	NOT WIRED S
A15J35	35	TEST SW ON RET	
A15J35	36	Z-SPARE	NOT USED
A15J35	37	11K BO SW CL RET	NOT WIRED S
A15J35	38	TEST SW ON	
A15J35	39	TRNS CNT RTD CCW	
A15J35	40	SPARE FIL INP 2A	
A15J35	41	ELS ENAB ON RET	
A15J35	42	AG	
A15J35	43	SPARE FIL INP 1A	
A15J35	44	ELS ENABLE ON	
A15J35	45	SPARE FIL INP 1A	
A15J35	46	AK	
A15J35	47	CMSM SEP INI RET	
A15J35	48	SPARE FIL INP 2A	
A15J35	49	AI	
A15J35	50	CMSM SEP INIT	
A15J35	51	AP	
A15J35	52	Z-SPARE	NOT USED
A15J35	53	LMSLA SEP INI RT	
A15J35	54	AO	
A15J35	55	AD	
A15J35	56	LMSLA SEP INIT	
A15J35	57	AC	

A15J35	58	AM	
A15J35	59	TNS CT RT CCW RT	
A15J35	60	AB	
A15J35	61	GND 4	
A15J36	1	+26VC	MB TRACE
A15J36	2	+26VC	MB TRACE
A15J36	3	100 KHZ	MB TRACE
A15J36	4	CLEAR BAR 2A RET	
A15J36	5	RESET ELB 2A	
A15J36	6	I1A-2 RET	
A15J36	7	SET EVENT 2-1A	
A15J36	8	I1A-2	
A15J36	9	SET EVENT 2-2A	
A15J36	10	SET EVENT 2-3A	
A15J36	11	SET EVENT 2-4A	
A15J36	12	SET EVENT 2-5A	
A15J36	13	SET EVENT 2-6A	
A15J36	14	SET EVENT 2-7A	
A15J36	15	IM NO SET 2A	
A15J36	16	SET LOAD 1	
A15J36	17	SEQ CLOCK 1 (V)	
A15J36	18	SET INT 2A	
A15J36	19	EVENT IND 1A	
A15J36	20	EVENT IND 1B	
A15J36	21	I4-2	
A15J36	22	I4-2 RET	
A15J36	23	I3-2	
A15J36	24	I3-2 RET	
A15J36	25	I2-2	
A15J36	26	I2-2 RET	
A15J36	27	SEQ GEN INHIBIT	
A15J36	28	RESTART 2A-3	
A15J36	29	RESTART 2A-1	
A15J36	30	NO A RET	
A15J36	31	I4B-1 RET	
A15J36	32	YES 2A	
A15J36	33	POS 2A RET	
A15J36	34	SPARE INP FILTER	
A15J36	35	POS 2A	
A15J36	36	SET EVENT 2-8A	
A15J36	37	IMMEDIATE NO 2A	
A15J36	38	Z-SPARE	
A15J36	39	PWR DOWN A5	
A15J36	40	MAN RESET 8	
A15J36	41	I1A-1	
A15J36	42	I1B-1	
A15J36	43	I2A-1	
A15J36	44	I3A-1	
A15J36	45	I4A-1	
A15J36	46	CLEAR BAR 2A	
A15J36	47	I1A-1 RET	
A15J36	48	I1B-1 RET	
A15J36	49	+26VS	MB TRACE
A15J36	50	SET INH 2-1A	
A15J36	51	SET INH 2-2A	
A15J36	52	EVENT IND 2A	
A15J36	53	I2B-1 RET	
A15J36	54	I3B-1 RET	
A15J36	55	+5VC	MB TRACE
A15J36	56	PS IN TOL	
A15J36	57	LOGIC BUSS	MB TRACE
A15J36	58	GND 3C	MB TRACE

A15J36	59	GND 3C	MB TRACE
A15J36	60	SFQ OVFR 1	
A15J36	61	GND 1	MB TRACE
A16J35	1	Z-SPARE	NOT USED
A16J35	2	Z-SPARE	NOT USED
A16J35	3	Z-SPARE TO E13	ONLY USED A15
A16J35	4	11K BARO SW CLOS	
A16J35	5	LIFTOFF	
A16J35	6	ET OFF	
A16J35	7	SPARE OUT 1B	
A16J35	8	EDS ABT SIG 3	
A16J35	9	24K BARO SW CLOS	
A16J35	10	SPARE OUT 2B	
A16J35	11	EDS ABT SIG 2	
A16J35	12	Z-SPARE	NOT USED
A16J35	13	OX DUMP ENABL RET	NOT WIRED S
A16J35	14	EDS ABT SIG 1	
A16J35	15	Z-SPARE	NOT USED
A16J35	16	AUTO ABT ENA RET	
A16J35	17	AUTO ABT ENABLE	
A16J35	18	Z-SPARE	NOT USED
A16J35	19	EDS ABT SIG1 RET	NOT WIRED S
A16J35	20	OX DMP ENABLE	
A16J35	21	Z-SPARE	NOT USED
A16J35	22	EDS ABT SIG2 RET	NOT WIRED S
A16J35	23	OUT SW RESET RET	
A16J35	24	Z-SPARE	NOT USED
A16J35	25	EDS ABT SIG3 RET	NOT WIRED S
A16J35	26	OUTPUT SW RESET	
A16J35	27	Z-SPARE	NOT USED
A16J35	28	LIFTOFF RET	
A16J35	29	TEST SW OFF RET	
A16J35	30	Z-SPARE	NOT USED
A16J35	31	ET OFF RET	
A16J35	32	TEST SW OFF	
A16J35	33	Z-SPARE	NOT USED
A16J35	34	24K BO SW CL RET	
A16J35	35	TEST SW ON RET	
A16J35	36	Z-SPARE	NOT USED
A16J35	37	11K BO SW CL RET	
A16J35	38	TEST SW ON	
A16J35	39	TRNS CNT RTD CCW	
A16J35	40	SPARE FIL INP 2B	
A16J35	41	ELS ENAB ON RET	
A16J35	42	BG	
A16J35	43	SPARE FIL INP 1B	
A16J35	44	ELS ENABLE ON	
A16J35	45	SPARE FIL INP 1B	
A16J35	46	BK	
A16J35	47	CMSM SEP INI RET	
A16J35	48	SPARE FIL INP 2B	
A16J35	49	BI	
A16J35	50	CMSM SEP INIT	
A16J35	51	BP	
A16J35	52	Z-SPARE	NOT USED
A16J35	53	LMSLA SEP INI RT	
A16J35	54	BO	
A16J35	55	BD	
A16J35	56	LMSLA SEP INIT	
A16J35	57	BC	
A16J35	58	BM	
A16J35	59	TNS CT RT CCW RT	

A16J35	60	BB	
A16J35	61	GND 4	MB TRACE
A16J39	1	+26VC	MB TRACE
A16J39	2	+26VC	MB TRACE
A16J39	3	100 KHZ	
A16J39	4	CLEAR BAR 2B RET	
A16J39	5	RESET FLB 2B	
A16J39	6	Z-SPARE	NOT USED
A16J39	7	SET EVENT 2-1B	
A16J39	8	SEQ GEN INHIBIT	
A16J39	9	SET EVENT 2-2B	
A16J39	10	SET EVENT 2-3B	
A16J39	11	SET EVENT 2-4B	
A16J39	12	SET EVENT 2-5B	
A16J39	13	SET EVENT 2-6B	
A16J39	14	SET EVENT 2-7B	
A16J39	15	IM NO SET 2B	
A16J39	16	SET LOAD 2	
A16J39	17	PWR UP INT 2B	
A16J39	18	SET INT 2B	
A16J39	19	Z-SPARE	NOT USED
A16J39	20	EVENT IND 2A	
A16J39	21	Z-SPARE	NOT USED
A16J39	22	MAN RESET 8	
A16J39	23	Z-SPARE	
A16J39	24	Z-SPARE	
A16J39	25	PWR DOWN B4	
A16J39	26	PWR DOWN B3	
A16J39	27	Z-SPARE	
A16J39	28	RESTART 2B-3	
A16J39	29	RESTART 2B-1	
A16J39	30	NO B RET	
A16J39	31	GND 1	
A16J39	32	YES 2B	
A16J39	33	POS 2B RET	
A16J39	34	SPARE EVENT INP	
A16J39	35	POS 2B	
A16J39	36	SET EVENT 2-8B	
A16J39	37	PWR DOWN A4	
A16J39	38	Z-SPARE	
A16J39	39	PWR DOWN A3	
A16J39	40	MAN RESET 7	
A16J39	41	I1A-2	
A16J39	42	SEQ CLOCK 2 (V)	
A16J39	43	I2-2	
A16J39	44	I3-2	
A16J39	45	I4-2	
A16J39	46	CLEAR BAR 2B	
A16J39	47	I1A-2 RET	
A16J39	48	IMMEDIATE NO 2B	
A16J39	49	+26VS	MB TRACE
A16J39	50	SET INH 2-1B	
A16J39	51	SET INH 2-2B	
A16J39	52	LOGIC BUSS	MB TRACE
A16J39	53	I2-2 RET	
A16J39	54	I3-2 RET	
A16J39	55	+5VC	MB TRACE
A16J39	56	PS IN TOL	
A16J39	57	I4-2 RET	
A16J39	58	GND 3D	MB TRACE
A16J39	59	GND 3D	MB TRACE
A16J39	60	SEQ OVER 2	

A17J39	61	GND 1	MB TRACE
A17J37	1	SET EVENT 1-10A	
A17J37	2	+26VC	MB TRACE
A17J37	3	SET EVENT 1-11A	
A17J37	4	I4B-1	
A17J37	5	I4A-1	
A17J37	6	I3A-1	
A17J37	7	PWR DOWN A1	
A17J37	8	I3B-1	
A17J37	9	I1A-1 RET	
A17J37	10	CLEAR BAR 1A	
A17J37	11	I1A-1	
A17J37	12	AB	
A17J37	13	AD	
A17J37	14	AC	
A17J37	15	AE	
A17J37	16	AH	
A17J37	17	RESTART 1A-2	
A17J37	18	AF	
A17J37	19	AJ	
A17J37	20	AG	
A17J37	21	AI	
A17J37	22	AM	
A17J37	23	AK	
A17J37	24	AL	
A17J37	25	AQ	
A17J37	26	AO	
A17J37	27	AP	
A17J37	28	SPARE-EVENT INPA	WIRED NOT USED
A17J37	29	AR	
A17J37	30	SPARE-EVENT INPA	WIRED NOT USED
A17J37	31	AN	
A17J37	32	RESET ELB 1A	
A17J37	33	POS 1A RET	
A17J37	34	YES 1A	
A17J37	35	POS 1A	
A17J37	36	NO A	
A17J37	37	I2A-1	
A17J37	38	I2B-1	
A17J37	39	CLEAR ELB 1A	
A17J37	40	SET EVENT 1-1A	
A17J37	41	IMMEDIATE NO 1A	
A17J37	42	EVENT IND 1A	
A17J37	43	SET EVENT 1-6A	
A17J37	44	SET EVENT 1-2A	
A17J37	45	SET EVENT 1-4A	
A17J37	46	SET EVENT 1-5A	
A17J37	47	SET EVENT 1-9A	
A17J37	48	SET EVENT 1-3A	
A17J37	49	+26VS	MB TRACE
A17J37	50	SET EVENT 1-8A	
A17J37	51	SET EVENT 1-7A	
A17J37	52	IM NO SET 1A	
A17J37	53	SET INH 1-1A	
A17J37	54	SET INT 1A	
A17J37	55	+5VS	MB TRACE
A17J37	56	SET EVENT 1-12A	
A17J37	57	SET EVENT 1-13A	
A17J37	58	GND 3C	MB TRACE
A17J37	59	SET INH 1-2A	
A17J37	60	GND 4	MB TRACE
A17J37	61	GND 1	MB TRACE

A17J38	1	+26VC	MB TRACE
A17J38	2	+26VC	MB TRACE
A17J38	3	Z-SPARE	
A17J38	4	+26VS	
A17J38	5	CLEAR BAR 1B	
A17J38	6	+26VS	
A17J38	7	POS 1A	
A17J38	8	CLEAR BAR 1A	
A17J38	9	POS 1B	
A17J38	10	POS 1A RET	
A17J38	11	NO A RET	
A17J38	12	POS 1B RET	
A17J38	13	SET BR ADD 1-0A	
A17J38	14	VCC CONT G(L)	
A17J38	15	SET BR ADD 1-0B	
A17J38	16	SET BR ADD 1-1A	
A17J38	17	LOGIC BUSS	
A17J38	18	SET BR ADD 1-1B	
A17J38	19	SET BR ADD 1-2A	
A17J38	20	VCC CONT(L)	
A17J38	21	SET BR ADD 1-2B	
A17J38	22	SET BR ADD 1-3A	
A17J38	23	Z-SPARE	NOT USED
A17J38	24	SET BR ADD 1-3B	
A17J38	25	SET BR ADD 1-4A	
A17J38	26	Z-SPARE	NOT USED
A17J38	27	SET BR ADD 1-4B	
A17J38	28	SET BR ADD 1-5A	
A17J38	29	Z-SPARE	NOT USED
A17J38	30	SET BR ADD 1-5B	
A17J38	31	SET BR ADD 1-6A	
A17J38	32	EL SHIFT 1	
A17J38	33	SET BR ADD 1-6B	
A17J38	34	SET BR ADD 1-7A	
A17J38	35	SET BR ADD 1-7B	
A17J38	36	SET BR ADD 1-8A	
A17J38	37	SET BR ADD 1-8B	
A17J38	38	SET BR ADD 1-9A	
A17J38	39	SET BR ADD 1-9B	
A17J38	40	BRANCH ADD B	
A17J38	41	BRANCH ADD A	
A17J38	42	RESTART 2A-2	
A17J38	43	RESTART 2A-1	
A17J38	44	RESTART 1A-1	
A17J38	45	Z-SPARE	
A17J38	46	.5 SEC OUT A	
A17J38	47	LOGIC BUSS D	
A17J38	48	BRANCH ADD 2B	
A17J38	49	+26VS	MB TRACE
A17J38	50	PS IN TOL	
A17J38	51	BRANCH ADD 2A	
A17J38	52	LOGIC BUSS	MB TRACE
A17J38	53	PWR DOWN (V) A	
A17J38	54	PWR UP (V) A	
A17J38	55	+5VS	MB TRACE
A17J38	56	Z-SPARE	NOT USED
A17J38	57	GND 3C	
A17J38	58	GND 3C	MB TRACE
A17J38	59	GND 3C	MB TRACE
A17J38	60	GND 4	MB TRACE
A17J38	61	GND 1	MB TRACE
A18J37	1	SET EVENT 1-10B	

A18J37	2	+26VC	MB TRACE
A18J37	3	SET EVENT 1-11B	
A18J37	4	I4B-1 RET	
A18J37	5	I4B-1	
A18J37	6	I3B-1	
A18J37	7	PWR DOWN BI	
A18J37	8	I3B-1 RET	
A18J37	9	I1B-1 RET	
A18J37	10	CLEAR BAR 1B	
A18J37	11	I1B-1	
A18J37	12	BB	
A18J37	13	BD	
A18J37	14	BC	
A18J37	15	BE	
A18J37	16	BH	
A18J37	17	RESTART 1B-2	
A18J37	18	BF	
A18J37	19	BJ	
A18J37	20	BG	
A18J37	21	BI	
A18J37	22	BM	
A18J37	23	BK	
A18J37	24	BL	
A18J37	25	BQ	
A18J37	26	BO	
A18J37	27	BP	
A18J37	28	SPARE-EVENT INPB	WIRED NOT USED
A18J37	29	BR	
A18J37	30	SPARE-EVENT INPB	WIRED NOT USED
A18J37	31	BN	
A18J37	32	RESET FLB 1B	
A18J37	33	POS 1B RET	
A18J37	34	YES 1B	
A18J37	35	POS 1B	
A18J37	36	NO B	
A18J37	37	I2B-1	
A18J37	38	I2B-1 RET	
A18J37	39	CLEAR FLB 1B	
A18J37	40	SET EVENT 1-1B	
A18J37	41	IMMEDIATE NO 1B	
A18J37	42	EVENT IND 1B	
A18J37	43	SET EVENT 1-6B	
A18J37	44	SET EVENT 1-2B	
A18J37	45	SET EVENT 1-4B	
A18J37	46	SET EVENT 1-5B	
A18J37	47	SET EVENT 1-9B	
A18J37	48	SET EVENT 1-3B	
A18J37	49	+26VS	MB TRACE
A18J37	50	SET EVENT 1-8B	
A18J37	51	SET EVENT 1-7B	
A18J37	52	IM NO SET 1B	
A18J37	53	SET INH 1-1B	
A18J37	54	SET INT 1B	
A18J37	55	+5VS	MB TRACE
A18J37	56	SET EVENT 1-12B	
A18J37	57	SET EVENT 1-13B	
A18J37	58	GND 3D	MB TRACE
A18J37	59	SET INH 1-2B	
A18J37	60	GND 4	MB TRACE
A18J37	61	GND 1	MB TRACE
A18J38	1	+26VC	MB TRACE
A18J38	2	+26VC	MB TRACE

A18J38	3	Z-SPARE	
A18J38	4	+26VS	
A18J38	5	CLEAR BAR 2B	
A18J38	6	+26VS	
A18J38	7	POS 2A	
A18J38	8	CLEAR BAR 2A	
A18J38	9	POS 2B	
A18J38	10	POS 2A RET	
A18J38	11	NO B RET	
A18J38	12	POS 2B RET	
A18J38	13	SET BR ADD 2-0A	
A18J38	14	Z-SPARE	
A18J38	15	SET BR ADD 2-0B	
A18J38	16	SET BR ADD 2-1A	
A18J38	17	LOGIC BUSS 0	
A18J38	18	SET BR ADD 2-1B	
A18J38	19	SET BR ADD 2-2A	
A18J38	20	Z-SPARE	NOT USED
A18J38	21	SET BR ADD 2-2B	
A18J38	22	SET BR ADD 2-3A	
A18J38	23	PWR ON CLEAR	
A18J38	24	SET BR ADD 2-3B	
A18J38	25	SET BR ADD 2-4A	
A18J38	26	Z-SPARE	NOT USED
A18J38	27	SET BR ADD 2-4B	
A18J38	28	SET BR ADD 2-5A	
A18J38	29	Z-SPARE	NOT USED
A18J38	30	SET BR ADD 2-5B	
A18J38	31	SET BR ADD 2-6A	
A18J38	32	EL SHIFT 2	
A18J38	33	SET BR ADD 2-6B	
A18J38	34	SET BR ADD 2-7A	
A18J38	35	SET BR ADD 2-7B	
A18J38	36	SET BR ADD 2-8A	
A18J38	37	SET BR ADD 2-8B	
A18J38	38	SET BR ADD 2-9A	
A18J38	39	SET BR ADD 2-9B	
A18J38	40	BRANCH ADD 2B	
A18J38	41	BRANCH ADD 2A	
A18J38	42	RESTART 2P-2	
A18J38	43	RESTART 2B-1	
A18J38	44	RESTART 1B-1	
A18J38	45	Z-SPARE	
A18J38	46	.5 SEC OUT B	
A18J38	47	LOGIC BUS IN TOL	
A18J38	48	GND 1	
A18J38	49	+26VS	
A18J38	50	PS IN TOL	MB TRACE
A18J38	51	GND 1	
A18J38	52	LOGIC BUSS	
A18J38	53	PWR DOWN (V) B	MB TRACE
A18J38	54	PWR UP (V) B	
A18J38	55	+5VS	
A18J38	56	+5VC	MB TRACE
A18J38	57	GND 3D	
A18J38	58	GND 3D	
A18J38	59	GND 3D	MB TRACE
A18J38	60	GND 4	MB TRACE
A18J38	61	GND 1	MB TRACE
A19J40	1	Z-SPARE IF	MB TRACE
A19J40	2	Z-SPARE	
A19J40	3	Z-SPARE	NOT USED
			NOT USED

A19J40	4	GND 4	
A19J40	5	Z-SPARE	MB TRACE
A19J40	6	Z-SPARE	NOT USED
A19J40	7	EDS ABT STG1 RET	NOT USED
A19J40	8	EDS ABT STG3 RET	NOT WIRED S
A19J40	9	Z-SPARE IF	NOT WIRED S
A19J40	10	EDS ABT STG2 RET	
A19J40	11	OX DUMP ENABL RET	NOT WIRED S
A19J40	12	EDS ABT ENAB RET	NOT WIRED S
A19J40	13	GO SIG RET	NOT USED EV CONN
A19J40	14	AUTO ABT ENABLE	NOT WIRED S
A19J40	15	EDS ABT STG 1	
A19J40	16	EDS ABT STG 2	
A19J40	17	Z-SPARE	
A19J40	18	Z-SPARE	NOT USED
A19J40	19	EDS ABT STG 3	NOT USED
A19J40	20	Z-SPARE	
A19J40	21	Z-SPARE	NOT USED
A19J40	22	OX DMP ENABLE	NOT USED
A19J40	23	Z-SPARE	
A19J40	24	Z-SPARE	NOT USED
A19J40	25	Z-SPARE	NOT USED
A19J40	26	Z-SPARE	NOT USED
A19J40	27	Z-SPARE	NOT USED
A19J40	28	BE	NOT USED
A19J40	29	AE	
A19J40	30	BF	
A19J40	31	AF	
A19J40	32	BH	
A19J40	33	AH	
A19J40	34	BJ	
A19J40	35	AJ	
A19J40	36	BN	
A19J40	37	AN	
A19J40	38	BR	
A19J40	39	AR	
A19J40	40	Z-SPARE IF	
A19J40	41	Z-SPARE IF	
A19J40	42	Z-SPARE	
A19J40	43	Z-SPARE	NOT USED
A19J40	44	Z-SPARE	NOT USED
A19J40	45	Z-SPARE	NOT USED
A19J40	46	BL	NOT USED
A19J40	47	AL	
A19J40	48	BQ	
A19J40	49	AQ	
A19J40	50	Z-SPARE-IF	
A19J40	51	Z-SPARE-IF	
A19J40	52	Z-SPARE	
A19J40	53	Z-SPARE	NOT USED
A19J40	54	Z-SPARE IF	NOT USED
A19J40	55	GOB	
A19J40	56	GOA	MB1 AND TT
A19J40	57	T 42 SEC A	MB1 AND TT
A19J40	58	T 42 SEC B	
A19J40	59	Z-SPARE IF	
A19J40	60	Z-SPARE IF	
A19J40	61	Z-SPARE	
A19J41	1	+26VC	NOT USED
A19J41	2	+26VC	MB TRACE
A19J41	3	Z-SPARE	MB TRACE
A19J41	4	STOP CLOCK A	NOT USED

A19J41	5	Z-SPARE	NOT USED
A19J41	6	CLEAR TIMER A	
A19J41	7	10 KHZ A	
A19J41	8	Z-SPARE	NOT USED
A19J41	9	SET TIMING MEM A	
A19J41	10	RESTART 1A-1	
A19J41	11	Z-SPARE	NOT USED
A19J41	12	RESTART 2A-2	
A19J41	13	RESTART 1A-2	
A19J41	14	PWR DOWN A2	
A19J41	15	RESTART 2A-3	
A19J41	16	PWR DOWN A3	
A19J41	17	Z-SPARE	NOT USED
A19J41	18	PWR DOWN B2	
A19J41	19	START CLOCK A	
A19J41	20	PWR DOWN B3	
A19J41	21	Z-SPARE	NOT USED
A19J41	22	Z-SPARE	NOT USED
A19J41	23	Z-SPARE	NOT USED
A19J41	24	Z-SPARE	NOT USED
A19J41	25	Z-SPARE	NOT USED
A19J41	26	Z-SPARE	NOT USED
A19J41	27	SET TIM BIT 8A	
A19J41	28	TIMER A	
A19J41	29	Z-SPARE	NOT USED
A19J41	30	Z-SPARE	NOT USED
A19J41	31	SET CLOCK 1A	
A19J41	32	Z-SPARE	NOT USED
A19J41	33	SET CLOCK 2A	
A19J41	34	SET CLOCK 3A	
A19J41	35	Z-SPARE	NOT USED
A19J41	36	SET CLOCK 4A	
A19J41	37	SET TIM BIT 0A	
A19J41	38	Z-SPARE	NOT USED
A19J41	39	SET TIM BIT 1A	
A19J41	40	SET TIM BIT 2A	
A19J41	41	Z-SPARE	NOT USED
A19J41	42	SET TIM BIT 3A	
A19J41	43	SET TIM BIT 4A	
A19J41	44	Z-SPARE	NOT USED
A19J41	45	SET TIM BIT 5A	
A19J41	46	SET TIM BIT 6A	
A19J41	47	Z-SPARE	NOT USED
A19J41	48	SET TIM BIT 7A	
A19J41	49	+26VS	MB TRACE
A19J41	50	Z-SPARE	NOT USED
A19J41	51	SET TIM BIT 9A	
A19J41	52	SET TIM BIT 10A	
A19J41	53	Z-SPARE	NOT USED
A19J41	54	SET TIM BIT 11A	
A19J41	55	+5VS	MB TRACE
A19J41	56	Z-SPARE	NOT USED
A19J41	57	+5VC	
A19J41	58	GND 3A	MB TRACE
A19J41	59	GND 3A	MB TRACE
A19J41	60	Z-SPARE	NOT USED
A19J41	61	GND 1	MB TRACE
A20J41	1	+26VC	MB TRACE
A20J41	2	+26VC	MB TRACE
A20J41	3	Z-SPARE	NOT USED
A20J41	4	STOP CLOCK B	
A20J41	5	Z-SPARE	NOT USED

A20J41	6	CLEAR TIMER B	
A20J41	7	10 KHZ B	
A20J41	8	Z-SPARE	NOT USED
A20J41	9	SET TIMING MFM B	
A20J41	10	RESTART 1B-1	
A20J41	11	Z-SPARE	NOT USED
A20J41	12	RESTART 2B-2	
A20J41	13	RESTART 1B-2	
A20J41	14	PWR DOWN A1	
A20J41	15	RESTART 2B-3	
A20J41	16	PWR DOWN A2	
A20J41	17	Z-SPARE	NOT USED
A20J41	18	PWR DOWN B1	
A20J41	19	START CLOCK B	
A20J41	20	PWR DOWN B2	
A20J41	21	Z-SPARE	NOT USED
A20J41	22	Z-SPARE	NOT USED
A20J41	23	Z-SPARE	NOT USED
A20J41	24	Z-SPARE	NOT USED
A20J41	25	Z-SPARE	NOT USED
A20J41	26	Z-SPARE	NOT USED
A20J41	27	SET TIM BIT 8B	
A20J41	28	TIMER B	
A20J41	29	Z-SPARE	NOT USED
A20J41	30	Z-SPARE	NOT USED
A20J41	31	SET CLOCK 1B	
A20J41	32	Z-SPARE	NOT USED
A20J41	33	SET CLOCK 2B	
A20J41	34	SET CLOCK 3B	
A20J41	35	Z-SPARE	NOT USED
A20J41	36	SET CLOCK 4B	
A20J41	37	SET TIM BIT 0B	
A20J41	38	Z-SPARE	NOT USED
A20J41	39	SET TIM BIT 1B	
A20J41	40	SET TIM BIT 2B	
A20J41	41	Z-SPARE	NOT USED
A20J41	42	SET TIM BIT 3B	
A20J41	43	SET TIM BIT 4B	
A20J41	44	Z-SPARE	NOT USED
A20J41	45	SET TIM BIT 5B	
A20J41	46	SET TIM BIT 6B	
A20J41	47	Z-SPARE	NOT USED
A20J41	48	SET TIM BIT 7B	
A20J41	49	+26VS	MB TRACE
A20J41	50	Z-SPARE	NOT USED
A20J41	51	SET TIM BIT 9B	
A20J41	52	SET TIM BIT 10B	
A20J41	53	Z-SPARE	NOT USED
A20J41	54	SET TIM BIT 11B	
A20J41	55	+5VS	MB TRACE
A20J41	56	Z-SPARE	NOT USED
A20J41	57	+5VC	
A20J41	58	GND 3B	MB TRACE
A20J41	59	GND 3B	MB TRACE
A20J41	60	Z-SPARE	NOT USED
A20J41	61	GND 1	MB TRACE
A20J42	1	+26VC	MB TRACE
A20J42	2	+26VC	MB TRACE
A20J42	3	CTC 7	
A20J42	4	CTB 0	
A20J42	5	CTA 4	
A20J42	6	CTC 8	

A20J42	7	CTB 1	
A20J42	8	CTA 5	
A20J42	9	CTC 9	
A20J42	10	CTB 2	
A20J42	11	CTA 6	
A20J42	12	MAN RESET 6	
A20J42	13	CTB 3	
A20J42	14	CTA 7	
A20J42	15	Z-SPARE	NOT USED
A20J42	16	CTB 4	
A20J42	17	CTA 8	
A20J42	18	Z-SPARE	NOT USED
A20J42	19	CTB 5	
A20J42	20	CTA 9	
A20J42	21	Z-SPARE	NOT USED
A20J42	22	CTB 6	
A20J42	23	CTC 0	
A20J42	24	Z-SPARE	NOT USED
A20J42	25	CTB 7	
A20J42	26	CTC 1	
A20J42	27	Z-SPARE	NOT USED
A20J42	28	CTB 8	
A20J42	29	CTC 2	
A20J42	30	Z-SPARE	NOT USED
A20J42	31	CTB 9	
A20J42	32	CTC 3	
A20J42	33	Z-SPARE	NOT USED
A20J42	34	CTA 0	
A20J42	35	CTC 4	
A20J42	36	Z-SPARE	NOT USED
A20J42	37	CTA 1	
A20J42	38	CTC 5	
A20J42	39	Z-SPARE	NOT USED
A20J42	40	GND 1	MB TRACE
A20J42	41	CTA 2	
A20J42	42	CTC 6	
A20J42	43	GND 1	MB TRACE
A20J42	44	CTA 3	
A20J42	45	MAN RESET 7	
A20J42	46	SET INPUT C	
A20J42	47	Z-SPARE	NOT USED
A20J42	48	ADD ADV AMP C	
A20J42	49	8 MHZ	GEN 10
A20J42	50	ADD ADV AMP B	
A20J42	51	ADD ADV AMP A	
A20J42	52	GND 1	MB TRACE SHIELD
A20J42	53	SET INPUT B	
A20J42	54	SET INPUT A	
A20J42	55	+5VC	MB TRACE
A20J42	56	+5VC	MB TRACE
A20J42	57	+26VS	MB TRACE
A20J42	58	GND 3E	MB TRACE
A20J42	59	GND 3E	MB TRACE
A20J42	60	+26VS	
A20J42	61	Z-SPARE	
MB2	E 1	GND 3E	
MB2	E 2	GND 3D	MB TRACE
MB2	E 3	GND 3A	MB TRACE
MB2	E 4	+5VS	MB TRACE
MB2	E 5	GND 4	MB TRACE
MB2	E 6	+26VS	MB TRACE
MB2	E 7	LOGIC BUSS	MB TRACE

MB?	E 8	+26VC		MB TRACE
MB?	E 9	GND 3B		MB TRACE
MB?	E10	GND 1		MB TRACE
MB?	E11	+5VC		MB TRACE
MB?	E12	GND 3C		MB TRACE
MB?		GND 1A		22AWG 2WIRES
MB?		GND 1B		22AWG 1WIRES
MB?		GND 1C		22AWG 1WIRES
MB?		GND 1D		22AWG 2WIRES
MB?		GND 1E		22AWG 2WIRES
MB?		GND 1F		22AWG 1WIRES
MB?	R31-X	YES 1A		
MB?	R32-X	YES 2A		
MB?	R33-X	YES 1B		
MB?	R34-X	YES 2B		
MB?	R35-X	BRANCH ADD B		
MB?	R36-X	BRANCH ADD A		
MB?	R37-X	LOAD DISABLE TT		
MB?	R38-X	PWR REQUEST (L) TT		
MB?	C21-X	GND 1F C		30-GA-COML
MB?	C29-X	GND 1F C		30-GA-COM L
MB?	C30-X	GND 1F C		30-GA-COM L
MB?	C31-Z	YES 1A(F)		
MB?	C32-Z	YES 2A(F)		
MB?	C33-Z	YES 1B(F)		
MB?	C34-Z	YES 2B(F)		
MB?	C35-Z	BRANCH ADD B(F)		
MB?	C35-Z	BRANCH ADD A(F)		
MB?	C37-Z	LOAD DISABLE (L)		
MB?	C38-Z	PWR REQUEST (L)		
A21J47	1	T1	2	GEN 10
A21J47	2	T2	5	GEN 30
A21J47	3	T3	2	GEN 10
A21J47	4	T4	2	GEN 10
A21J47	5	T5	2	GEN 10
A21J47	6	T6	3	GEN 30
A21J47	7	T7	2	GEN 10
A21J47	8	T8	4	GEN 10
A21J47	9	T9	3	GEN 10
A21J47	10	T0	2	GEN 30
A21J47	11	T1*	1	GEN 10
A21J47	12	T2*	2	GEN 10
A21J47	13	READ CONT A	2	GEN 10
A21J47	14	T4*	2	GEN 10
A21J47	15	T5*	2	GEN 10
A21J47	16	READ CONT B	2	GEN 10
A21J47	17	SEQ GEN INHIBIT	1	GEN 10
A21J47	18	T8*	10	GEN 30
A21J47	19	T9*	1	GEN 10
A21J47	20	T0*	1	GEN 10
A21J47	21	8 MHZ	2	
A21J47	22	1 MHZ A	8	GEN 30
A21J47	23	1 MHZ*		GEN 10
A21J47	24	1 MHZ OUT		GEN 30
A21J47	25	10 KHZ A	2	GEN 10
A21J47	26	10 KHZ B		GEN 10
A21J47	27	100 KHZ		GEN 10
A21J47	29	PWR DEMAND MOM A	1	
A21J47	30	TIME DELAY(L) A	2	GEN 10
A21J47	31	START CLOCK A		GEN XISTOR
A21J47	32	SET TIMING MEM A		GEN XISTOR
A21J47	33	STOP CLOCK A		GEN 10

A21J47	34	CMD EXECUTE A		GEN 10
A21J47	35	PWR DEMAND	3	
A21J47	36	POA	12	
A21J47	37	SW PWR AVAIL	1	
A21J47	38	PWR DEMAND MOM B	2	
A21J47	39	PWR DEMAND OFF A	1	
A21J47	40	PWR DEMAND OFF B	1	
A21J47	41	TIMER A	3	
A21J47	42	TIMER CONT A(L)		GEN 1.25 (LP)
A21J47	43	TIMER CONT B		GEN 1.25 (LP)
A21J47	44	1 MHZC*		
A21J47	45	CLAMP FAULT		
A21J47	46	Z-SPARE		
A21J47	47	SW PWR IN TOL(L)	1	
A21J47	48	T C FAULT OUT(L)	1	
A21J47	49	RFD FAULT(L)	1	
A21J47	50	ARMV FAULT(L)	1	
A21J47	51	ARMV FAULT (L)*	1	
A21J47	52	MC FAULT(L)	1	
A21J47	53	BRANCH FAULT(L)	1	
A21J47	54	FAULT RESET(L)		
A21J47	55	FAULT LIGHT		GEN XISTOR
A21J47	56	A FVEN	1	
A21J47	57	MR FAULT(L)	1	
A21J47	58	PWR INHIBIT (L)		
A21J47	59	1 MHZ B		GEN 10
A21J47	60	PWR ON CLEAR		
A21J47	61	SEQ CLOCK 1 (V)	1	
A21J47	62	SEQ OVER 1	1	DISCRETE LOAD
A21J47	63	Z-SPARE		
A21J47	64	Z-SPARE		
A21J47	65	SEQ CLOCK 2 (V)	1	
A21J47	66	SEQ OVER 2	1	DISCRETE LOAD
A21J47	67	CAUTION LIGHT		GEN XISTOR
A21J47	69	TIME DELAY(L) B	2	GEN 10
A21J47	70	START CLOCK B		GEN XISTOR
A21J47	71	SET TIMING MEM B		GEN XISTOR
A21J47	72	TIMING BIT B	1	
A21J47	73	POB	3	
A21J47	74	STOP (L)B	2	
A21J47	75	SET T2B	1	
A21J47	76	STOP CLOCK B		GEN 10
A21J47	77	CMD EXECUTE B		GEN 10
A21J47	78	SW PWR AVAIL*	2	
A21J47	79	TIMER B	1	
A21J47	28	MR0	1	E4 L-1
A21J47	68	MR1	1	E5 L-1
A21J47	80	MR2	1	E6 L-1
A21J47	81	MR3	1	E7 L-1
A21J47	82	MR4	1	E8 L-1
A21J47	83	MR5	1	E9 L-1
A21J47	84	MR6	1	E10 L-1
A21J47	85	+5VC		MB TRACE
A21J47	86	+5VC		MB TRACE
A21J47	87	DATA AVAIL A	22	E11 L-22
A21J47	88	GND 1		MB TRACE
A21J47	89	GND 1		MB TRACE
A21J47	90	STOP(L) A		
A21J47	91	+5VS		MB TRACE
A21J47	92	+5VS		MB TRACE
A21J50A	1	SET CMD BIT 0-0A		
A21J50A	2	SET CMD BIT 1-1A		

A21J50A 3	SET CMD BIT 1-0A	
A21J50A 4	SET CMD BIT 0-1A	
A21J50A 5	SET EVENT 1-13A	
A21J50A 6	MR10	1
A21J50A 7	SET T1A	7
A21J50A 8	SET CMD BIT 4-1A	
A21J50A 9	MR9	1
A21J50A10	SET T2(L)A	1
A21J50A11	SET CMD BIT 5-0A	
A21J50A12	SET CMD BIT 4-0A	
A21J50A13	SET BR ADD 2-4A	
A21J50A14	SET BR ADD 2-5A	
A21J50A15	SET CMD BIT 5-1A	
A21J50A16	SET EVENT 1-3A	
A21J50A17	SET EVENT 1-4A	
A21J50A18	SET BR ADD 2-3A	
A21J50A19	SET BR ADD 2-0A	
A21J50A20	SET BR ADD 2-1A	
A21J50A21	SET BR ADD 2-2A	
A21J50A22	SET BR ADD 1-9A	
A21J50A23	SET INH 2-1A	
A21J50A24	SET INH 2-2A	
A21J50A25	MR8	1
A21J50A26	SET BR ADD 1-6A	
A21J50A27	SET BR ADD 1-7A	
A21J50A28	SET CMD BIT 2-1A	
A21J50A29	SET CMD BIT 2-0A	
A21J50A30	SET EVENT 1-1A	
A21J50A31	SET 2 FLB 1(L)A	11
A21J50A32	SET EVENT 1-2A	
A21J50A33	SET BR ADD 1-8A	
A21J50A34	SET BR ADD 1-5A	
A21J50A35	SET EVENT 1-8A	
A21J50A36	SET BR ADD 1-4A	
A21J50A37	SET EVENT 1-7A	
A21J50A38	SET BR ADD 1-2A	
A21J50A39	SET BR ADD 1-3A	
A21J50A40	SET CMD BIT 3-1A	
A21J50A41	SET CMD BIT 3-0A	
A21J50A42	SET BR ADD 1-1A	
A21J50A43	SET INH 1-1A	
A21J50A44	SET INH 1-2A	
A21J50A45	SET BR ADD 1-0A	
A21J50A46	SET 3 FLB 1(L)A	7
A21J50A47	SET EVENT 1-6A	
A21J50A48	SET 1 FLB 2(L)A	7
A21J50A49	SET EVENT 1-5A	
A21J50A50	SET EVENT 1-11A	
A21J50A51	SET EVENT 1-12A	
A21J50A52	MR7	1
A21J50A53	SET TIM BIT 11A	
A21J50A54	SET 1 FLB 1(L)A	7
A21J50A55	SET CLOCK 1A	
A21J50A56	SET CLOCK 4A	
A21J50A57	SET TIM BIT 10A	
A21J50A58	SET EVENT 1-9A	
A21J50A59	SET EVENT 1-10A	
A21J50A60	SET TIM BIT 9A	
A21J50A61	SET TIM BIT 6A	
A21J50A62	SET TIM BIT 7A	
A21J50A63	SET TIM BIT 8A	
A21J50A64	SET CLOCK 2A	

A21J50A65	SET CLOCK 3A		
A21J50A66	SET TIM BIT 5A		
A21J50A67	SET TIM BIT 2A		
A21J50A68	SET TIM BIT 3A		
A21J50A69	SET TIM BIT 4A		
A21J50A70	SET EVENT 2-8A		
A21J50A71	SET TIM BIT 0A		
A21J50A72	SET TIM BIT 1A		
A21J50A73	SET EVENT 2-5A		
A21J50A74	SET EVENT 2-6A		
A21J50A75	SET EVENT 2-7A		
A21J50A76	SET 2 FLB 2(L)A	11	
A21J50A77	SET EVENT 2-3A		
A21J50A78	SET EVENT 2-4A		
A21J50A79	SET BR ADD 2-9A		
A21J50A80	SET BR ADD 2-8A		
A21J50A81	SET EVENT 2-2A		
A21J50A82	SET BR ADD 2-6A		
A21J50A83	SET BR ADD 2-7A		
A21J50A84	SET EVENT 2-1A		
A21J50A85	+5VC		MB TRACE
A21J50A86	+5VC		MB TRACE
A21J50A87	MWR 3A(L)	6	GEN 10
A21J50A88	GND 1		MB TRACE
A21J50A89	GND 1		MB TRACE
A21J50A90	SET 3 FLB 2(L)A	2	
A21J50A91	+5VS		MB TRACE
A21J50A92	+5VS		MB TRACE
A22J49 1	MR FAULT(L)		GEN 10
A22J49 2	MR IN	2	
A22J49 3	EN CMP MRA(L)	1	
A22J49 4	EN S MR(L)	2	
A22J49 5	MRA CLOCK(L)	1	
A22J49 6	CLEAR MRA	1	
A22J49 7	EN SAA(L)	5	
A22J49 8	SA0	2	
A22J49 9	SA1	2	
A22J49 10	SA2	2	
A22J49 11	SA3	2	
A22J49 12	SA4	2	
A22J49 13	SA5	2	
A22J49 14	SA6	2	
A22J49 15	SA7	2	
A22J49 16	SA8	2	
A22J49 17	SA9	2	
A22J49 18	SA10	2	
A22J49 19	SA11	2	
A22J49 20	EN CMP MRB(L)	1	
A22J49 21	Z-SPARE		NOT USED
A22J49 22	MRB CLOCK(L)	1	
A22J49 23	CLEAR MRB	1	
A22J49 24	EN SAB(L)	5	
A22J49 25	Z-SPARE		NOT USED
A22J49 26	MR0	2	E1 1 GEN 10
A22J49 27	MR1	2	E2 1 GEN 10
A22J49 28	MR2	2	E3 1 GEN 10
A22J49 29	MR3	2	E4 1 GEN 10
A22J49 30	MR4	2	E5 1 GEN 10
A22J49 31	MR5	2	E6 1 GEN 10
A22J49 32	MR6	2	E7 1 GEN 10
A22J49 33	MR7	2	E8 1 GEN 10
A22J49 34	MR8	2	E9 1 GEN 10

A22J49	35	MR9	2	F10 1 GEN 10
A22J49	36	MR10	2	F11 1 GEN 10
A22J49	37	MR11		
A22J49	38	ALL FAULTS(L)		GEN 30
A22J49	39	RFD FAULT(L)		GEN 30
A22J49	40	DATA AVAIL B	21	F12-20
A22J49	41	PWR HOLD*	4	
A22J49	42	SW PWR AVAIL	8	
A22J49	43	TO	5	
A22J49	44	TIME DELAY(L) A	1	
A22J49	45	STOP(L) A	1	
A22J49	46	PWR REQUEST (L)	3	
A22J49	47	PWR DOWN (V) A		
A22J49	48	DATA ENABLE 3A	1	
A22J49	49	T9*	3	
A22J49	50	RECYCLE A(L)		GEN 10
A22J49	51	POA*	1	GEN 30
A22J49	52	POA	3	GEN 30
A22J49	53	NO A(L)	1	
A22J49	54	SUB 2	1	
A22J49	55	YES 1A(L)	1	
A22J49	56	YES 2A(L)	1	
A22J49	57	BRANCH INT(L)A	1	
A22J49	58	PWR DEMAND OFF A		GEN 1.25 (LP)
A22J49	59	PWR DEMAND MOM A		GEN 1.25 (LP)
A22J49	60	TIMER CONT A(L)	1	
A22J49	61	.5 SEC OUT A		DISCRETE LOAD
A22J49	62	PROGRAM START (L)		DISCRETE LOAD
A22J49	63	MR0*	1	GEN 10
A22J49	64	PWR ON CLEAR		
A22J49	65	Z-SPARE		NOT USED
A22J49	66	Z-SPARE		NOT USED
A22J49	67	SW PWR CLEAR		
A22J49	68	TURN PO OFF		
A22J49	69	Z-SPARE		NOT USED
A22J49	70	Z-SPARE		NOT USED
A22J49	71	Z-SPARE		NOT USED
A22J49	72	Z-SPARE		NOT USED
A22J49	73	Z-SPARE		NOT USED
A22J49	74	Z-SPARE		NOT USED
A22J49	75	Z-SPARE		NOT USED
A22J49	76	Z-SPARE		NOT USED
A22J49	77	Z-SPARE		NOT USED
A22J49	78	Z-SPARE		NOT USED
A22J49	79	Z-SPARE		NOT USED
A22J49	80	A EVEN	3	
A22J49	81	Z-SPARE		NOT USED
A22J49	82	Z-SPARE		NOT USED
A22J49	83	Z-SPARE		NOT USED
A22J49	84	Z-SPARE		NOT USED
A22J49	85	+5VC		MB TRACE
A22J49	86	+5VC		MB TRACE
A22J49	87	Z-SPARE		
A22J49	88	GND 1		MB TRACE
A22J49	89	GND 1		MB TRACE
A22J49	90	Z-SPARE		
A22J49	91	+5VS		MB TRACE
A22J49	92	+5VS		MB TRACE
A22J50	1	SET CMD BIT 0-0B		
A22J50	2	SET CMD BIT 1-1B		
A22J50	3	SET CMD BIT 1-0B		
A22J50	4	SET CMD BIT 0-1B		

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A22J50  5  SET EVENT 1-13B
A22J50  6  SET T1B              2
A22J50  7  MWR 3B(L)            7                    GEN 10
A22J50  8  SET CMD BIT 4-1B
A22J50  9  SET T2(L)B           1
A22J50 10  SET 3 ELB 2(L) B     2
A22J50 11  SET CMD BIT 5-0B
A22J50 12  SET CMD BIT 4-0B
A22J50 13  SET BR ADD 2-4B
A22J50 14  SET BR ADD 2-5B
A22J50 15  SET CMD BIT 5-1B
A22J50 16  SET EVENT 1-3B
A22J50 17  SET EVENT 1-4B
A22J50 18  SET BR ADD 2-3B
A22J50 19  SET BR ADD 2-0B
A22J50 20  SET BR ADD 2-1B
A22J50 21  SET BR ADD 2-2B
A22J50 22  SET BR ADD 1-9B
A22J50 23  SET INH 2-1B
A22J50 24  SET INH 2-2B
A22J50 25  TIMING BIT B                              GEN 10
A22J50 26  SET BR ADD 1-6B
A22J50 27  SET BR ADD 1-7B
A22J50 28  SET CMD BIT 2-1B
A22J50 29  SET CMD BIT 2-0B
A22J50 30  SET EVENT 1-1B
A22J50 31  SET 2 ELB 1(L)B     11
A22J50 32  SET EVENT 1-2B
A22J50 33  SET BR ADD 1-8B
A22J50 34  SET BR ADD 1-5B
A22J50 35  SET EVENT 1-8B
A22J50 36  SET BR ADD 1-4B
A22J50 37  SET EVENT 1-7B
A22J50 38  SET BR ADD 1-2B
A22J50 39  SET BR ADD 1-3B
A22J50 40  SET CMD BIT 3-1B
A22J50 41  SET CMD BIT 3-0B
A22J50 42  SET BR ADD 1-1B
A22J50 43  SET INH 1-1B
A22J50 44  SET INH 1-2B
A22J50 45  SET BR ADD 1-0B
A22J50 46  SET 3 ELB 1(L)B      7
A22J50 47  SET EVENT 1-6B
A22J50 48  SET 1 ELB 2(L)B      7
A22J50 49  SET EVENT 1-5B
A22J50 50  SET EVENT 1-11B
A22J50 51  SET EVENT 1-12B
A22J50 52  STOP (L)B                                 GEN 10
A22J50 53  SET TIM BIT 11B
A22J50 54  SET 1 ELB 1(L)B      7
A22J50 55  SET CLOCK 1B
A22J50 56  SET CLOCK 4B
A22J50 57  SET TIM BIT 10B
A22J50 58  SET EVENT 1-9B
A22J50 59  SET EVENT 1-10B
A22J50 60  SET TIM BIT 9B
A22J50 61  SET TIM BIT 6B
A22J50 62  SET TIM BIT 7B
A22J50 63  SET TIM BIT 8B
A22J50 64  SET CLOCK 2B
A22J50 65  SET CLOCK 3B
A22J50 66  SET TIM BIT 5B
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A22J50	67	SET TIM BTT 2B		
A22J50	68	SET TIM BTT 3B		
A22J50	69	SET TIM BTT 4B		
A22J50	70	SET EVENT 2-8B		
A22J50	71	SET TIM BTT 0B		
A22J50	72	SET TIM BTT 1B		
A22J50	73	SET EVENT 2-5B		
A22J50	74	SET EVENT 2-6B		
A22J50	75	SET EVENT 2-7B		
A22J50	76	SET 2 FLB 2(L)B	11	
A22J50	77	SET EVENT 2-3B		
A22J50	78	SET EVENT 2-4B		
A22J50	79	SET BR ADD 2-9B		
A22J50	80	SET BR ADD 2-8B		
A22J50	81	SET EVENT 2-2B		
A22J50	82	SET BR ADD 2-6B		
A22J50	83	SET BR ADD 2-7B		
A22J50	84	SET EVENT 2-1B		
A22J50	85	+5VC		MB TRACE
A22J50	86	+5VC		MB TRACE
A22J50	87	Z-SPARE		NOT USED
A22J50	88	GND 1		MB TRACE
A22J50	89	GND 1		MB TRACE
A22J50	90	Z-SPARE		NOT USED
A22J50	91	+5VS		MB TRACE
A22J50	92	+5VS		MB TRACE
A23J51	1	CTC 0	1	
A23J51	2	CTC 1	1	
A23J51	3	CTC 2	1	
A23J51	4	CTC 3	1	
A23J51	5	CTC 4	1	
A23J51	6	CTC 5	1	
A23J51	7	CTC 6	1	
A23J51	8	CTC 7	1	
A23J51	9	CTC 8	1	
A23J51	10	CTC 9	1	
A23J51	11	EN XFER	10	
A23J51	12	ARC 0	2	GEN 10
A23J51	13	EN S AR(L)	1	
A23J51	14	EN C AR(L)	1	
A23J51	15	EN CMP AR(L)	1	
A23J51	16	BRANCH ADD A(F)	1	
A23J51	17	SUB 2	23	
A23J51	18	ARC CLOCK(L)	6	
A23J51	19	CLEAR ARC	1	
A23J51	20	TEST 20 (L)	1	
A23J51	21	TEST 25 (L)	1	
A23J51	22	TEST 21 (L)	1	
A23J51	23	AR0	1	GEN 10
A23J51	24	TEST 24 (L)	1	
A23J51	25	AR4	1	GEN 10
A23J51	26	AR5	1	GEN 10
A23J51	27	AR1	1	GEN 10
A23J51	28	TEST 22 (L)	1	
A23J51	29	TEST 26 (L)	1	
A23J51	30	TEST 23 (L)	1	
A23J51	31	AR3	1	GEN 10
A23J51	32	AR2	1	GEN 10
A23J51	33	TEST 27 (L)	1	
A23J51	34	AR7	1	GEN 10
A23J51	35	AR6	1	GEN 10
A23J51	36	TEST 28 (L)	1	

A23J51	37	TEST 29 (L)	1	
A23J51	38	ARA	1	GEN 10
A23J51	39	ARMV FAULT (L)*		GEN 10
A23J51	40	AR9	1	GEN 10
A23J51	41	POA	4	
A23J51	42	T1	2	
A23J51	43	ARA CLOCK(L)	4	
A23J51	44	POA*	5	
A23J51	45	ARA 9	1	
A23J51	46	ARB 9	1	
A23J51	47	ADD ADV AMP A	1	GEN 10
A23J51	48	SET AMP A	1	GEN 10
A23J51	49	ARB CLOCK(L)	4	
A23J51	50	ADD ADV AMP B	1	GEN 10
A23J51	51	SET AMP B		GEN 10
A23J51	52	PWR ON CLEAR		
A23J51	53	ADD ADV AMP C	1	GEN 10
A23J51	54	SET AMP C(L)		GEN 10
A23J51	55	PWR HOLD*	5	
A23J51	56	SW PWR AVAIL	4	
A23J51	57	T0	3	
A23J51	58	TIME DELAY(L) B	1	
A23J51	59	STOP (L)B	1	
A23J51	60	PWR REQUEST (L)	2	
A23J51	61	PWR DOWN (V) B	1	DISCRETE
A23J51	62	DATA ENABLE 3B	1	
A23451	63	SW PWR CLEAR		
A23J51	64	T8*	1	
A23J51	65	RECYCLE B(L)	1	GEN 10
A23J51	66	T C FAULT (L)	1	
A23J51	67	POB*	4	GEN 30
A23J51	68	POB	1	GEN 30
A23J51	69	NO B(L)	1	
A23J51	70	YES 1B(L)	1	
A23J51	71	YES 2B(L)	1	
A23J51	72	BRANCH INT(L)B	1	
A23J51	73	PWR DEMAND OFF B	1	GEN 25
A23J51	74	PWR DEMAND MOM B	1	GEN 25
A23J51	75	TIMER CONT B (L)	1	
A23J51	76	.5 SEC OUT B	1	DISCRETE
A23J51	77	PROGRAM START (L)	1	DISCRETE
A23J51	78	T C FAULT OUT(L)	1	GEN 10
A23J51	79	SET AMP A(L)	1	GEN 10
A23J51	80	SET AMP B(L)	1	GEN 10
A23J51	81	Z-SPARE		NOT USED
A23J51	82	Z-SPARE		NOT USED
A23J51	83	Z-SPARE		NOT USED
A23J51	84	Z-SPARE		NOT USED
A23J51	85	+5VC		MB TRACE
A23J51	86	+5VC		MB TRACE
A23J51	87	Z-SPARE		NOT USED
A23J51	88	GND 1		MB TRACE
A23J51	89	GND 1		MB TRACE
A23J51	90	Z-SPARE		NOT USED
A23J51	91	+5VS		MB TRACE
A23J51	92	+5VS		MB TRACE
A23J52	1	CTB 0	1	
A23J52	2	ARA 9	5	GEN 10
A23J52	3	Z-SPARE		NOT USED
A23J52	4	CTA 0	1	
A23J52	5	ARB CLOCK(L)	4	
A23J52	6	SET AMP A		

A23J52	7	CTRF 1	1	
A23J52	8	Z-SPARE		
A23J52	9	CLEAR ARB	1	
A23J52	10	CTA 1	1	
A23J52	11	ARB 9	3	GEN 10
A23J52	12	Z-SPARE		NOT USED
A23J52	13	CTR 2	1	
A23J52	14	ARC 0	2	
A23J52	15	Z-SPARE		NOT USED
A23J52	16	CTA 2	1	
A23J52	17	TEST 20 (L)	1	
A23J52	18	Z-SPARE		NOT USED
A23J52	19	CTR 3	1	
A23J52	20	TEST 25 (L)	1	
A23J52	21	Z-SPARE		NOT USED
A23J52	22	CTA 3	1	
A23J52	23	TEST 21 (L)	1	
A23J52	24	SET AMP B		
A23J52	25	CTR 4	1	
A23J52	26	AR1*	1	GEN 10
A23J52	27	Z-SPARE		NOT USED
A23J52	28	CTA 4	1	
A23J52	29	ARD*	1	GEN 10
A23J52	30	Z-SPARE		NOT USED
A23J52	31	CTR 5	1	
A23J52	32	TEST 24 (L)	1	
A23J52	33	Z-SPARE		NOT USED
A23J52	34	CTA 5	1	
A23J52	35	AR4*	1	GEN 10
A23J52	36	SET INPUT C		
A23J52	37	CTR 6	1	
A23J52	38	AR5*	1	GEN 10
A23J52	39	Z-SPARE		NOT USED
A23J52	40	CTA 6	1	
A23J52	41	TEST 22 (L)	1	
A23J52	42	BRANCH ADD B(F)		
A23J52	43	CTR 7	1	
A23J52	44	TEST 26 (L)	1	
A23J52	45	BRANCH FAULT(L)		GEN 10
A23J52	46	CTA 7	1	
A23J52	47	TEST 23 (L)	1	
A23J52	48	SET INPUT A		
A23J52	49	CTR 8	1	
A23J52	50	AR3*	1	GEN 10
A23J52	51	Z-SPARE		NOT USED
A23J52	52	CTA 8	1	
A23J52	53	AR2*	1	GEN 10
A23J52	54	Z-SPARE		NOT USED
A23J52	55	CTR 9	1	
A23J52	56	TEST 27 (L)	1	
A23J52	57	Z-SPARE		NOT USED
A23J52	58	CTA 9	1	
A23J52	59	AR7*	1	GEN 10
A23J52	60	Z-SPARE		NOT USED
A23J52	61	EN XFER	20	
A23J52	62	AR6*	1	GEN 10
A23J52	63	Z-SPARE		NOT USED
A23J52	64	EN S AR(L)	2	
A23J52	65	TEST 28 (L)	1	
A23J52	66	Z-SPARE		NOT USED
A23J52	67	EN C AR(L)	2	
A23J52	68	TEST 29 (L)	1	

A23J52	69	SFT INPUT B		
A23J52	70	EN CMP AR(L)	2	
A23J52	71	ARB*	1	GEN 10
A23J52	72	SFT AMP C(L)	1	
A23J52	73	BRANCH ADD A(F)	5	
A23J52	74	AR9*	1	GEN 10
A23J52	75	SFT AMP C(L) TT		
A23J52	76	SUB 2(L)	2	
A23J52	77	ARMV FAULT(L)	1	GEN 10
A23J52	78	Z SPARE		NOT USED
A23J52	79	ARA CLOCK(L)	4	
A23J52	80	Z-SPARE		NOT USED
A23J52	81	Z-SPARE		NOT USED
A23J52	82	CLEAR ARA	1	
A23J52	83	Z-SPARE		NOT USED
A23J52	84	Z-SPARE		NOT USED
A23J52	85	+5VC		MB TRACE
A23J52	86	+5VC		MB TRACE
A23J52	87	Z-SPARE		NOT USED
A23J52	88	GND 1		MB TRACE
A23J52	89	GND 1		MB TRACE
A23J52	90	Z-SPARE		NOT USED
A23J52	91	+5VS		MB TRACE
A23J52	92	+5VS		MB TRACE
A24J53	1	T1	2	
A24J53	2	DISABLE AR COUNT	2	
A24J53	3	POB*	3	
A24J53	4	CMD READ(L)	3	
A24J53	5	EN A	5	GEN 10
A24J53	6	EN B	3	GEN 10
A24J53	7	1 MHZ A	8	
A24J53	8	T6	10	F6 L-6
A24J53	9	1 MHZ*	8	
A24J53	10	T2	12	
A24J53	11	PWR HOLD*	7	GEN 30 E7-L2
A24J53	12	1 MHZ B	8	
A24J53	13	T4	6	E10 L-4
A24J53	14	CMD RECYCLE(L)	2	
A24J53	15	RECYCLE B(L)	2	E14 L-1
A24J53	16	LOAD(L)	1	
A24J53	17	EN MRA	4	
A24J53	18	EN MRB	4	
A24J53	19	POB	5	
A24J53	20	RECYCLE A(L)	2	E9 L-1
A24J53	21	PWR DEMAND	3	DISCRETE
A24J53	22	DUMP	1	
A24J53	23	EN CMP MRA(L)	3	GEN 10
A24J53	24	EN CMP MRB(L)	3	GEN 10
A24J53	25	T0	16	F8 L-4
A24J53	26	SUB 2	1	GEN 30
A24J53	27	EN XFER	1	GEN 30
A24J53	28	EN CMP AR(L)	3	GEN 10
A24J53	29	POA	5	
A24J53	30	T5*		
A24J53	31	PWR INHIBIT (L)		
A24J53	32	Z-SPARE		NOT USED
A24J53	33	1 MHZ*		
A24J53	34	SW PWR CLEAR		
A24J53	35	VCC CONT B(L)		
A24J53	36	Z-SPARE		NOT USED
A24J53	37	Z-SPARE		NOT USED
A24J53	38	Z-SPARE		NOT USED

A24J53	39	DATA AVAIL B	1	GEN 30
A24J53	40	T0*	4	
A24J53	41	TEST 3 (L)	1	
A24J53	42	VCC CONTROL(L)		
A24J53	43	POTP	3	DISCRETES GEN 10
A24J53	44	CLEAR MRA	1	GEN 10
A24J53	45	CLEAR MRB	1	GEN 10
A24J53	46	TEST 1 (L)	4	
A24J53	47	TEST 2 (L)	4	
A24J53	48	T9	8	
A24J53	49	TEST 5	6	
A24J53	50	SUB 2(L)	1	GEN 10
A24J53	51	Z-SPARE		NOT USED
A24J53	52	Z-SPARE		NOT USED
A24J53	53	Z-SPARE		NOT USED
A24J53	54	T3	2	
A24J53	55	TEST 4 (L)	2	
A24J53	56	POA*	2	
A24J53	57	R/R(L)	1	GEN 10
A24J53	58	C/W(L)	1	GEN 10
A24J53	59	EL SHIFT 2	1	GEN 10
A24J53	60	EL SHIFT 1	1	GEN 10
A24J53	61	EN SAB(L)	1	GEN 10
A24J53	62	EN SAA(L)	1	GEN 10
A24J53	63	SW PWR AVAIL	9	F1 L-6 GEN 30
A24J53	64	ARC CLOCK(L)	2	GEN 10
A24J53	65	EN S AR(L)	3	GEN 10
A24J53	66	EN ARB	4	
A24J53	67	EN C AR(L)	2	GEN 10
A24J53	68	CMD CLEAR AR(L)	2	
A24J53	69	DATA AVAIL A	1	GEN 30
A24J53	70	MC FAULT(L)		GEN 10
A24J53	71	TEST 15	2	
A24J53	72	TEST 6 (L)		
A24J53	73	CLEAR ARC	1	GEN 10
A24J53	74	CLEAR ARB	1	GEN 10
A24J53	75	CMD CLEAR MR(L)	4	
A24J53	76	EN S MR(L)	4	
A24J53	77	EN ARA	4	
A24J53	78	TEST 7 (L)		
A24J53	79	SW PWR AVAIL*	1	GEN 30 NOT USED
A24J53	80	MRB CLOCK(L)	1	GEN 10
A24J53	81	MRA CLOCK(L)	1	GEN 10
A24J53	82	ARA CLOCK(L)	2	GEN 10
A24J53	83	ARB CLOCK(L)	2	GEN 10
A24J53	84	CLEAR ARA	1	GEN 10
A24J53	85	+5VS		MB TRACE
A24J53	86	+5VS		MB TRACE
A24J53	87	Z-SPARE		NOT USED
A24J53	88	GND 1		MB TRACE
A24J53	89	GND 1		MB TRACE
A24J53	90	Z-SPARE		NOT USED
A24J53	91	+5VS		MB TRACE
A24J53	92	+5VS		MB TRACE
A24J54	1	SET LOAD 1		GEN 10
A24J54	2	SET LOAD 2		GEN 10
A24J54	3	POA*	2	
A24J54	4	DATA AVAIL A	7	
A24J54	5	DATA ENABLE 3B	2	GEN 10
A24J54	6	DATA ENABLE 3A	2	GEN 10
A24J54	7	PWR UP INT 1A		CORE SIGNAL
A24J54	8	NO A		

A24J54	9	DATA AVAIL B	7		
A24J54	10	SET 2 FLB 2(L)A		GEN	30
A24J54	11	SET 1 FLB 2(L)A	1	GEN	30
A24J54	12	PWR ON CLEAR			
A24J54	13	SET 2 FLB 1(L)A		GEN	30
A24J54	14	CLEAR TIMER A		GEN	10
A24J54	15	SET T2(L)A		GEN	30
A24J54	16	Z-SPARE		NOT	USED
A24J54	17	SET 1 FLB 1(L)A	1	GEN	30
A24J54	18	IMMEDIATE NO 2A			CTL SIGNAL
A24J54	19	MWR 3A	2		
A24J54	20	YES 1A(F)			CTL SIGNAL
A24J54	21	IMMEDIATE NO 1A			CTL SIGNAL
A24J54	22	YES 2A(L)		GEN	LOW LEVEL
A24J54	23	T7	2		
A24J54	24	YES 1A(L)		GEN	LOW LEVEL
A24J54	25	YES 2A(F)			CTL SIGNAL
A24J54	26	POA	4		
A24J54	27	CLEAR ELB 2A		GEN	10
A24J54	28	PWR REQUEST (L)	2		
A24J54	29	CLEAR FLB 1A		GEN	10
A24J54	30	T5	4		
A24J54	31	LOAD DISABLE	2		
A24J54	32	POC*		GEN	30
A24J54	33	CLEAR ELB 2B		GEN	10
A24J54	34	TURN PO OFF			
A24J54	35	Z-SPARE			
A24J54	36	SET 3 ELB 1(L)B	2	GEN	30
A24J54	37	SET 3 ELB 2(L)B			
A24J54	38	SET 1 FLB 2(L)B	1	GEN	30
A24J54	39	Z-SPARE			
A24J54	40	SET 3 FLB 2(L)A			
A24J54	41	SET 1 FLB 1(L)B	1	GEN	30
A24J54	42	SET 2 ELB 2(L)B		GEN	30
A24J54	43	SET 3 ELB 1(L)A	2	GEN	30
A24J54	44	IM NO SET 2B			
A24J54	45	CLEAR FLB 1B		GEN	10
A24J54	46	SET INT 2B			DISCRETE CIRCUIT
A24J54	47	SET T2B		GEN	10
A24J54	48	IM NO SET 1B			
A24J54	49	NO A(L)	1	GEN	10
A24J54	50	CLEAR TIMER B		GEN	10
A24J54	51	SET T2(L)B	1	GEN	30
A24J54	52	T8*	6		
A24J54	53	POB	4		
A24J54	54	MWR 3B	2		
A24J54	55	SET T1B		GEN	10
A24J54	56	IMMEDIATE NO 1B			CTL SIGNAL
A24J54	57	SET INT 1B			DISCRETE CIRCUIT
A24J54	58	NO B(L)	1	GEN	10
A24J54	59	READ CONT B	1		
A24J54	60	READ B(L)	2	GEN	10
A24J54	61	POB*	7		
A24J54	62	BRANCH INT(L)B		GEN	LOW POWER
A24J54	63	IMMEDIATE NO 2B			CTL SIGNAL
A24J54	64	BRANCH INT(L)A		GEN	LOW POWER
A24J54	65	PWR UP INT 1B			
A24J54	66	NO B			
A24J54	67	T8	4		
A24J54	68	SS ENABLE	4		
A24J54	69	SET 2 FLB 1(L)B		GEN	30
A24J54	70	SINGLE STEP	2	NOT	USED

A24J54	71	MRD+	2		
A24J54	72	T9+	6		
A24J54	73	READ CONT A	1		
A24J54	74	MR1	2		
A24J54	75	SET INT 1A			DISCRETE CIRCUIT
A24J54	76	MRD	2		
A24J54	77	YES 1B(L)		GEN	LOW POWER
A24J54	78	SET INT 2A			DISCRETE CIRCUIT
A24J54	79	SET T1A		GEN 10	
A24J54	80	YES 1B(F)			CTL SIGNAL
A24J54	81	YES 2B(L)		GEN	LOW POWER
A24J54	82	IM·NO SET 1A			
A24J54	83	IM NO SET 2A			
A24J54	84	YES 2B(F)			CTL SIGNAL
A24J54	85	+5VC		MB TRACE	
A24J54	86	+5VC		MB TRACE	
A24J54	87	Z-SPARE		NOT USED	
A24J54	88	GND 1		MB TRACE	
A24J54	89	GND 1		MB TRACE	
A24J54	90	Z-SPARE		NOT USED	
A24J54	91	+5VS		MB TRACE	
A24J54	92	+5VS		MB TRACE	

I/O Connector Listing

PD1	11	LIFTOFF	
PD1	12	ET OFF	
PD1	13	AUTO ABT ENABLE	
PD1	14	EDS ABT STG 1	
PD1	15	EDS ABT STG 2	
PD1	16	EDS ABT STG 3	
PD1	17	OX DMP ENABLE	
PD1	18	24K BARO SW CLOS	
PD1	19	11K BARO SW CLOS	
PD1	20	Z-SPARE 1	
PD1	21	TRNS CNT PTD CCW	
PD1	22	LMSLA SEP INTT	
PD1	23	CMSM SEP INTT	
PD1	24	ELS ENABLE ON	
PD1	25	TEST SW ON	
PD1	26	TEST SW OFF	
PD1	27	OUTPUT SW RESET	
PD1	28	Z-SPARE 2	
PD1	29	Z-SPARE 3	
PD1	30	Z-SPARE 4	
J 2	2	LOGIC BUSS	
J 2	3	GND 4	
J 3	2	RE-ENTRY BUSS	
J 3	3	GND 5	
J 3	4	FLIGHT BUSS	
J 3	5	GND 5	
J 3	6	LAUNCH BUSS	
J 3	7	GND 5	
PD4	1	PFC-11	MANUAL LES MOTOR FIRE
PD4	2	PFC-11 RET	
PD4	3	PFC-18	MANUAL ET JETTISON MOTOR
PD4	4	PFC-18 RET	
PD4	5	PFC-15	MANUAL CANARD DEPLOY
PD4	6	PFC-15 RET	
PD4	7	PFC-26	MANUAL CSM-SLA SEP
PD4	8	PFC-26 RET	
PD4	9	PFC-8	MANUAL CM RCS PRESSURIZATION
PD4	10	PFC-8 RET	
PD4	11	PFC-19	MANUAL APEX COVER JETTISON
PD4	12	PFC-19 RET	
PD4	13	PFC-20	MANUAL DROGUE CHUTE DEPLOY
PD4	14	PFC-20 RET	
PD4	15	PFC-23	MANUAL DROGUE CHUTE DISCONN
PD4	16	PFC-23 RET	
PD4	17	PFC-24	MANUAL DEPLOY PILOT CHUTE NO1
PD4	18	PFC-24 RET	
PD4	19	PFC-25	MANUAL DEPLOY PILOT CHUTE NO2
PD4	20	PFC-25 RET	
PD4	21	PFC-27	MANUAL LM DOCKING RING SEP
PD4	22	PFC-27 RET	
PD4	23	PFC-21	MANUAL CM RCS PURGE NO1
PD4	24	PFC-21 RET	
PD4	25	PFC-22	MANUAL CM RCS PURGE NO2
PD4	26	PFC-22 RET	
PD4	27	PFC-9	MANUAL CM-SM SEP NO1
PD4	28	PFC-9 RET	
PD4	29	PFC-10	MANUAL CM-SM SEP NO2
PD4	30	PFC-10 RET	
PD4	31	PFC-6	MANUAL OXIDIZER DUMP NO1
PD4	32	PFC-6 RET	
PD4	33	PFC-7	MANUAL OXIDIZER DUMP NO2
PD4	34	PFC-7 RET	

PD4 35	PFC-13	MANUAL FUEL DUMP NO1
PD4 36	PFC-13 RET	
PD4 37	PFC-14	MANUAL FUEL DUMP NO2
PD4 38	PFC-14 RET	
PD4 39	PFC-21	MANUAL CM RCS PURGE NO1
PD4 40	PFC-21 RET	
PD4 41	PFC-22	MANUAL CM RCS PURGE NO2
PD4 42	PFC-22 RET	
PD4 43	PFC-1	MANUAL LM-SLA SEP NO1
PD4 44	PFC-1 RET	
PD4 45	PFC-2	MANUAL LM-SLA SEP NO2
PD4 46	PFC-2 RET	
PD4 47	MAIN CHUTE DISC	MANUAL ONLY
PD4 48	MAIN CH DISC RET	
PD4 49	CLOSE LM PRES V	MANUAL ONLY
PD4 50	CLOSE LM P V RET	
PD4 51	LM D PROBE RTR I	MANUAL ONLY
PD4 52	LM D P RTR I RET	
PD4 53	LM D PROBE RTR F	MANUAL ONLY
PD4 54	LM D P RTR F RET	
JD5 1	PFC-1-1	LM-SLA SEP PY RO 1
JD5 2	PFC-1-1 RET	
JD5 3	PFC-1-2	LM-SLA SEP PYRO 2
JD5 4	PFC-1-2 RET	
JD5 5	PFC-2-1	LM-SLA SEP PYRO 3
JD5 6	PFC-2-1 RET	
JD5 7	PFC-2-2	LM-SLA SEP PYRO 4
JD5 8	PFC-2-2 RET	
JD5 9	PFC-3-1	CUT LM-LV UMB PYRO 1
JD5 10	PFC-3-1 RET	
JD5 11	PFC-3-2	CUT LM-LV UMB PYRO 2
JD5 12	PFC-3-2 RET	
JD5 13	PFC-24-1	DEPLOY PILOT CHUTE PYRO 1
JD5 14	PFC-24-1 RET	
JD5 15	PFC-24-2	DEPLOY PILOT CHUTE PYRO 2
JD5 16	PFC-24-2 RET	
JD5 17	PFC-25-1	DEPLOY PILOT CHUTE PYRO 3
JD5 18	PFC-25-1 RET	
JD5 19	PFC-26-1	CXM-SLA SEP
JD5 20	PFC-26-1 RET	
JD5 21	PFC-11-1	LES MOTOR FIRE
JD5 22	PFC-11-1 RET	
JD5 23	PFC-12-1	PITCH CONTROL MOTOR FIRE
JD5 24	PFC-12-1 RET	
JD5 25	PFC-15-1	CANARD DEPLOY
JD5 26	PFC-15-1 RET	
JD5 27	PFC-18-1	ET JETTISON MOTOR
JD5 28	PFC-18-1 RET	
JD5 29	MAIN CHUTE DIS-1	
JD5 30	MAIN C DIS-1 RET	
JD5 31	MAIN CHUTE DIS-2	
JD5 32	MAIN C DIS-2 RET	
JD5 33	MAIN CHUTE DIS-3	
JD5 34	MAIN C DIS-3 RET	
JD5 35	CL LM PRES V-1	
JD5 36	CL LM P V-1 RET	
JD5 37	LM D PR RTR I-1	
JD5 38	LM D P R I-1 RET	
JD5 39	LM D PR RTR F-1	
JD5 40	LM D P R F-1 RET	
JD6 1	PFC-6-1	OXIDIZER DUMP PYRO 1
JD6 2	PFC-6-1 RET	

J06	3	PFC-6-2	OXIDIZER DUMP PYRO 2
J06	4	PFC-6-2 RET	
J06	5	PFC-7-1	OXIDIZER DUMP PYRO 3
J06	6	PFC-7-1 RET	
J06	7	PFC-8-1	CM RCS PRESSURIZATION PYRO 1
J06	8	PFC-8-1 RET	
J06	9	PFC-8-2	CM RCS PRESSURIZATION PYRO 2
J06	10	PFC-8-2 RET	
J06	11	PFC-9-1	CM-SM SEP PYRO 1
J06	12	PFC-9-1 RET	
J06	13	PFC-9-2	CM-SM SEP PYRO 2
J06	14	PFC-9-2 RET	
J06	15	PFC-10-1	CM-SM SEP PYRO 3
J06	16	PFC-10-1 RET	
J06	17	PFC-10-2	CM-SM SEP PYRO 4
J06	18	PFC-10-2 RET	
J06	19	PFC-13-1	FUEL DUMP PYRO 1
J06	20	PFC-13-1 RET	
J06	21	PFC-13-2	FUEL DUMP PYRO 2
J06	22	PFC-13-2 RET	
J06	23	PFC-14-1	FUEL DUMP PYRO 3
J06	24	PFC-14-1 RET	
J06	25	PFC-21-1	CM RCS PURGE PYRO 1
J06	26	PFC-21-1 RET	
J06	27	PFC-21-2	CM RCS PURGE PYRO 2
J06	28	PFC-21-2 RET	
J06	29	PFC-22-1	CM RCS PURGE PYRO 3
J06	30	PFC-22-1 RET	
J06	31	PFC-22-2	CM RCS PURGE PYRO 4
J06	32	PFC-22-2 RET	
J07	1	BECO	
J07	2	BECO RET	GND 4
J07	3	RESET EV TM	FROM 100MA SW 1
J07	4	RESET EV TM RET	GND 4
J07	5	CM-SM PWR XFER	FROM MSD 1
J07	6	CM-SM P XFER RET	GND 4
J07	7	LES ABORT ENABLE	FROM 100MA SW 2
J07	8	LES ABORT EN RET	GND 4
J07	9	CL OX ISOL VAL	FROM SD 1
J07	10	CL OX ISOL V RET	GND 4
J07	11	CM-SM RCS XFER	FROM MSD 2
J07	12	CM-SM RCS XF RET	GND 4
J07	13	CM-SM RCS XFER	TO G+N(CM-SM SEP ACCOMPLISHD)
J07	14	CM-SM RCS XF RET	GND 4
J07	15	ENABLE CM RCS	FROM 0.5A SW 1
J07	16	EN CM RCS RET	GND 4
J07	17	CL FL ISOL VAL	FROM SD 2
J07	18	CL FL ISOL V RET	GND 4
J07	19	EN ELS BUS	FROM 100MA SW 3
J07	20	EN ELS BUS RET	GND 4
J07	21	ACT 11K BAROSW	FROM 100MA SW 4
J07	22	ACT 11K BSW RET	GND 4
J07	23	SM X JETS 1	FROM SD 3
J07	24	SM X JETS 1 RET	GND 4
J07	25	SM X JETS 2	FROM SD 4
J07	26	SM X JETS 2 RET	GND 4
J07	27	SM X JETS 1	TO G+N(SPS ABORT ACCOMPLISHD)
J07	28	SM X JETS 1 RET	GND 4
J07	29	SM X JETS 2	TO SCS(INHIBIT P+Y STAB)
J07	30	SM X JETS 2 RET	GND 4
J07	31	ENABLE SM RCS	FROM 0.5A SW 2
J07	32	EN SM RCS RET	GND 4

J07 33	GOA	TO FRONT PANEL
J07 34	GOB	TO FRONT PANEL
J07 35	CAUTION LIGHT	TO FRONT PANEL
J07 36	FAULT LIGHT	TO FRONT PANEL
J07 37	INITIATE SMJC A	
J07 38	INITIATE SMJC B	
J07 39	T 42 SEC A	TEST TOOL ONLY
J07 40	T 42 SEC B	TEST TOOL ONLY
J07 41	NO GO	
J07 42	NO GO RET	
J07 60	GND 4	
J07 61	GND 4	
J08 1	PFC-1	LM-SLA SEP (PYROS 1+2)
J08 2	PFC-2	LM-SLA SEP (PYROS 3+4)
J08 3	PFC-3	CUT LM-LV UMBILICAL
J08 4	PFC-4	CM-SM DEADFACE (PYROS 1+2)
J08 5	PFC-5	CM-SM DEADFACE (PYROS 3+4)
J08 6	PFC-6	OXIDIZER DUMP (PYROS 1+2)
J08 7	PFC-7	OXIDIZER DUMP (PYRO 3)
J08 8	PFC-8	CM RCS PRESSURIZATION
J08 9	PFC-9	CM-SM SEP (PYROS 1+2)
J08 10	PFC-10	CM-SM SEP (PYROS 3+4)
J08 11	PFC-11	LES MOTOR FIRE
J08 12	PFC-12	PITCH CONTROL MOTOR FIRE
J08 13	PFC-13	FUEL DUMP (PYROS 1+2)
J08 14	PFC-14	FUEL DUMP (PYRO 3)
J08 15	PFC-15	CANARD DEPLOY
J08 16	PFC-16	TOWER LEG NUTS (PYROS 1+2)
J08 17	PFC-17	TOWER LEG NUTS (PYROS 3+4)
J08 18	PFC-18	ET JETTISON MTTOR
J08 19	PFC-19	APEX COVER JETTISON
J08 20	PFC-20	DROGUE CHUTE DEPLOY
J08 21	PFC-21	CM RCS PURGE (PYROS 1+2)
J08 22	PFC-22	CM RCS PURGE (PYROS 3+4)
J08 23	PFC-23	DISCONNECT DROGUE CHUTE
J08 24	PFC-24	DEPLOY PILOT CHUTE(PYROS 1+2
J08 25	PFC-25	DEPLOY PILOT CHUTE(PYRO 3)
J08 26	PFC-26	CSM-SLA SEP
J08 27	PFC-27	LM DOCKING RING SEP
J08 28	LANYARD SW CL	APEX COVER DROGUE CHUTE DEPL
J08 29	LM D PROBE RTR I	
J08 30	LM D PROBE RTR F	
J08 31	CLOSE LM PRES V	
J08 32	MAIN CHUTE DIS	
J08 37	GND 5	
J09 1	CLEAR SYSTEM D	
J09 02	Z SPARE	
J09 3	CMD EXECUTE A	
J09 4	CMD EXECUTE B	
J09 5	Z-SPARE	
J09 6	OS RESET INCL	
J09 7	Z-SPARE	
J09 8	+5VC	
J09 9	TEST TOOL GND	
J09 10	CLEAR SYSTEM (V)	
J09 11	STOP(L) A	
J09 12	FAULT RESET(L)	
J09 13	PWR HOLD*	
J09 14	Z-SPARE	
J09 15	SS ENABLE	
J09 16	SINGLE STEP	
J09 17	DISABLE AR COUNT	

J09 19	READ B(L)	
J09 19	SW PWR AVATL *	
J09 20	POC *	
J09 21	PROGRAM START(L)	
J09 22	TEST TOOL GND	
J09 60	SHIELD	
J09 61	SHIELD	
J09 23	Z-SPARE	
J09 24	Z-SPARE	
J09 25	SET AMP A(L)	
J09 26	SET AMP B(L)	
J09 27	SET AMP C(L)	
P10 1	CMD CLEAR MR(L)	
P10 2	CMD READ(L)	TEST TOOL
P10 3	CMD RECYCLE(L)	
P10 4	EN ARA	
P10 5	EN ARB	
P10 6	EN A	
P10 7	EN B.	
P10 8	EN MRA	
P10 9	EN MRB	
P10 10	TEST 1 (L)	
P10 11	TEST 2 (L)	
P10 12	TEST 3 (L)	
P10 13	TEST 4 (L)	
P10 14	TEST 5	
P10 15	TEST 6 (L)	
P10 16	TEST 7 (L)	
P10 17	TEST 8	
P10 18	TEST 9	
P10 19	TEST 10 (L)	
P10 20	TEST 11 (L)	
P10 21	TEST 12	
P10 22	TEST 13	
P10 23	TEST 14	
P10 24	TEST 15	TEST TOOL
P10 25	TEST 16 (L)	
P10 26	TEST 17 (L)	
P10 27	TEST 18 (L)	
P10 28	TEST 19 (L)	
P10 29	TEST 20 (L)	
P10 30	TEST 21 (L)	
P10 31	TEST 22 (L)	
P10 32	TEST 23 (L)	
P10 33	TEST 24 (L)	
P10 34	TEST 25 (L)	
P10 35	TEST 26 (L)	
P10 36	TEST 27 (L)	
P10 37	TEST 28 (L)	
P10 38	TEST 29 (L)	
P10 39	PWR REQUEST (L)	
P10 40	LOAD(L)	
P10 41	LOAD DISABLE(L)	TEST TOOL
P10 42	CMD CLEAR AR(L)	TEST TOOL
P10 43	EN S MR(L)	TEST TOOL
P10 44	T0	TEST TOOL
P10 45	T2	TEST TOOL
P10 46	T4	TEST TOOL
P10 47	T5	TEST TOOL
P10 48	T8	TEST TOOL
P10 49	T9	TEST TOOL
P10 50	MR IN	TEST TOOL

P10	51	1 MHZ OUT	TEST TOOL
P10	52	SPARE	
P10	53	SPARE	
P10	54	ALL FAULTS (1)	
P10	55	SPARE	
P10	56	SPARE	
P10	58	+5VC	
P10	59	GND 1	
P10	60	SHIELD	
P10	61	SHIELD	
J11	1	PFC-1-T	LM-SLA SEP (PYROS 1+2)
J11	2	PFC-2-T	LM-SLA SEP (PYROS 3+4)
J11	3	PFC-3-T	CUT LM-LV UMBILICAL
J11	4	PFC-4-T	CM-SM DEADFACE (PYROS 1+2)
J11	5	PFC-5-T	CM-SM DEADFACE (PYROS 3+4)
J11	6	PFC-6-T	OXIDIZER DUMP (PYROS 1+2)
J11	7	PFC-7-T	OXIDIZER DUMP (PYRO 3)
J11	8	PFC-8-T	CM RCS PRESSURIZATION
J11	9	PFC-9-T	CM-SM SEP (PYROS 1+2)
J11	10	PFC-10-T	CM-SM SEP (PYROS 3+4)
J11	11	PFC-11-T	LES MOTOR FIRE
J11	12	PFC-12-T	PITCH CONTROL MOTOR FIRE
J11	13	PFC-13-T	FUEL DUMP (PYROS 1+2)
J11	14	PFC-14-T	FUEL DUMP (PYRO 3)
J11	15	PFC-15-T	CANARD DEPLOY
J11	16	PFC-16-T	TOWER LEG NUTS (PYROS 1+2)
J11	17	PFC-17-T	TOWER LEG NUTS (PYROS 3+4)
J11	18	PFC-18-T	FT JETTISON MOTOR
J11	19	PFC-19-T	APEX COVER JETTISON
J11	20	PFC-20-T	DROGUE CHUTE DEPLOY
J11	21	PFC-21-T	CM RCS PURGE (PYROS 1+2)
J11	22	PFC-22-T	CM RCS PURGE (PYROS 3+4)
J11	23	PFC-23-T	DISCONNECT DROGUE CHUTE
J11	24	PFC-24-T	DEPLOY PILOT CHUTE(PYROS 1+2)
J11	25	PFC-25-T	DEPLOY PILOT CHUTE(PYRO 3)
J11	26	PFC-26-T	CSM-SLA SEP
J11	27	PFC-27-T	LM DOCKING RING SEP
J11	28	PFC-28-T	APEX COVER DROGUE CHUTE DEPL
J11	31	BFCO-T	
J11	32	RESET EV TM-T	
J11	33	CM-SM PWR XFER-T	
J11	34	LES ABORT EN-T	
J11	35	CL OX ISOL VAL-T	
J11	36	CM-SM RCS XFER-T	
J11	37	ENABLE CM RCS-T	
J11	38	CL FL ISOL VAL-T	
J11	39	EN ELS BUS-T	
J11	40	ACT 11K BAROSW-T	
J11	41	SM X JETS 1-T	
J11	42	SM X JETS 2-T	
J11	43	ENABLE SM RCS-T	
J11	60	TEL RET 1	LOGIC BUS RETURN
J11	61	TEL RET 2	PYRO BUS RETURN
J12	1	PFC-16-1	TOWER LEG NUTS PYRO 1
J12	2	PFC-16-1 RET	
J12	3	PFC-16-2	TOWER LEG NUTS PYRO 2
J12	4	PFC-16-2 RET	
J12	5	PFC-17-1	TOWER LEG NUTS PYRO 3
J12	6	PFC-17-1 RET	
J12	7	PFC-17-2	TOWER LEG NUTS PYRO 4
J12	8	PFC-17-2 RET	
J12	9	PFC-19-1	APEX COVER JETTISON PYRO 1

J12 10	PFC-19-1 RET	
J12 11	PFC-19-2	APEX COVER JETTISON PYRO 2
J12 12	PFC-19-2 RET	
J12 13	PFC-20-1	DROGUE CHUTE DEPLOY PYRO 1
J12 14	PFC-20-1 RET	
J12 15	PFC-20-2	
J12 16	PFC-20-2 RET	
J12 17	PFC-23-1	DISCONNECT DROGUE CH PYRO 1
J12 18	PFC-23-1 RET	
J12 19	PFC-23-2	DISCONNECT DROGUE CH PYRO 2
J12 20	PFC-23-2 RET	
J12 21	PFC-4-1	CM-SM DEADFACE PYRO 1
J12 22	PFC-4-1 RET	
J12 23	PFC-4-2	CM-SM DEADFACE PYRO 2
J12 24	PFC-4-2 RET	
J12 25	PFC-5-1	CM-SM DEADFACE PYRO 3
J12 26	PFC-5-1 RET	
J12 27	PFC-5-2	CM-SM DEADFACE PYRO 4
J12 28	PFC-5-2 RET	
J12 29	PFC-27-1	LM DOCKING RING SEP
J12 30	PFC-27-1 RET	
J12 31	PFC-28	ENABLE LANYARD SW
J12 32	PFC-28 RET	
J12 33	LANYARD SW CL	UNPUT FROM LANYARD SW
J12 34	LAN SW CL RET	
J12 35	LAN SW CL-1	APEX COVER DROGUE CHUTE DEPL
J12 36	LAN SW CL-1 RET	
J12 37		SPARE PIN
J18 1	PFC-24	
J18 7	PFC-24 RET	
J18 8	PFC-6	
J18 9	PFC-6 RET	
J18 10	PFC-4	
J18 11	PFC-4 RET	
J18 12	PFC-7	
J18 13	PFC-7 RET	
J18 14	PFC-16	
J18 15	PFC-16 RET	
J18 16	PFC-5	
J18 17	PFC-5 RET	
J18 18	PFC-13	
J18 19	PFC-13 RET	
J18 20	PFC-22	
J18 21	PFC-22 RET	
J18 22	PFC-21	
J18 23	PFC-21 RET	
J18 24	PFC-12	
J18 25	PFC-12 RET	
J18 26	PFC-25	
J18 27	PFC-25 RET	
J18 28	PFC-17	
J18 29	PFC-17 RET	
J18 30	PFC-14	
J18 31	PFC-14 RET	
J18 32	LANYARD SW CL	
J18 33	LAN SW CL RET	
J18 34	LM D PROBE RTR F	
J18 35	LM D P RTR F RET	
J18 36	CLOSE LM PRFS V	
J18 37	CLOSE LM P V RET	
J19 1	PFC-26	
J19 7	PFC-26 RET	

J19	8	PFC-3
J19	9	PFC-3 RET
J19	10	PFC-1
J19	11	PFC-1 RET
J19	12	PFC-10
J19	13	PFC-10 RET
J19	14	PFC-20
J19	15	PFC-20 RET
J19	16	PFC-9
J19	17	PFC-9 RET
J19	18	PFC-8
J19	19	PFC-8 RET
J19	20	PFC-23
J19	21	PFC-23 RET
J19	22	PFC-18
J19	23	PFC-18 RET
J19	24	PFC-19
J19	25	PFC-19 RET
J19	26	PFC-15
J19	27	PFC-15 RET
J19	28	PFC-11
J19	29	PFC-11 RET
J19	30	PFC-2
J19	31	PFC-2 RET
J19	32	PFC-27
J19	33	PFC-27 RET
J19	34	LM D PROBE RTR I
J19	35	LM D P RTR I RET
J19	36	MAIN CHUTE DISC
J19	37	MAIN CH DISC RET
J20	2	LANYARD SW CL
J20	3	LAN SW CL-1
J20	8	PFC-19-2
J20	10	PFC-20-1
J20	11	PFC-20
J20	12	PFC-20-2
J20	14	PFC-23-1
J20	15	PFC-23
J20	16	PFC-23-2
J20	17	PFC-27
J20	18	PFC-27-1
J20	19	PFC-19
J20	20	PFC-4-1
J20	21	PFC-4
J20	22	PFC-4-2
J20	24	PFC-5-1
J20	25	PFC-5
J20	26	PFC-5-2
J20	28	PFC-16-1
J20	29	PFC-16
J20	30	PFC-16-2
J20	32	PFC-17-1
J20	33	PFC-17
J20	34	PFC-17-2
J20	36	PFC-19-1
J21	2	LM O PR RTP F-1
J21	5	PFC-24
J21	6	PFC-24-1
J21	7	LM D PROBE RTR F
J21	8	PFC-26-1
J21	11	CLOSE LM PRES V
J21	12	CL LM PRES V-1

J21	15	LM D PROBE RTR I
J21	16	LM D PR RTR I-1
J21	17	PFC-24-2
J21	19	PFC-26
J21	21	PFC-12
J21	22	PFC-12-1
J21	25	PFC-15
J21	26	PFC-15-1
J21	29	PFC-18
J21	30	PFC-18-1
J21	33	PFC-25
J21	34	PFC-25-1
J21	38	PFC-1-1
J21	39	PFC-1
J21	40	PFC-1-2
J21	43	PFC-2-1
J21	44	PFC-2
J21	45	PFC-2-2
J21	48	PFC-3-1
J21	49	PFC-3
J21	50	PFC-3-2
J21	53	MAIN CHUTE DIS-1
J21	54	MAIN CHUTE DIS-2
J21	56	MAIN CHUTE DIS-3
J21	57	MAIN CHUTE DIS
J21	59	PFC-11
J21	60	PFC-11-1
J22	2	PFC-14
J22	3	PFC-14-1
J22	8	PFC-13-2
J22	10	PFC-21-1
J22	11	PFC-21
J22	12	PFC-21-2
J22	14	PFC-22-1
J22	15	PFC-22
J22	16	PFC-22-2
J22	17	PFC-7
J22	18	PFC-7-1
J22	19	PFC-13
J22	20	PFC-6-1
J22	21	PFC-6
J22	22	PFC-6-2
J22	24	PFC-8-1
J22	25	PFC-8
J22	26	PFC-8-2
J22	28	PFC-9-1
J22	29	PFC-9
J22	30	PFC-9-2
J22	32	PFC-10-1
J22	33	PFC-10
J22	34	PFC-10-2
J22	36	PFC-13-1
P61	1	+5VC-1
P61	2	+5VC-2
P61	3	+5VS-1
P61	4	+5VS-2
P61	5	PS IN TOL-1
P61	6	PS IN TOL-2
P61	7	SW PWR IN TOL(L)
P61	8	DUMP
P61	9	VCC CONTROL(L)
P61	10	LOGIC BUS IN TOL

P61	11	PDIP	
P61	13	-6VS-1	
P61	14	-6VS-2	
P61	18	GND1-1	
P61	19	GND1-2	
P61	20	GND2-1	
P61	21	GND2-2	
P61	22	TEST TOOL GND	
P61	23	GND4-1	
P61	24	GND4-2	
P61	25	GND3A	
P61	26	GND3B	
P61	27	GND3C-1	
P61	28	GND3C-2	
P61	29	GND3D-1	
P61	30	GND3D-2	
P61	31	GND3E-1	
P61	32	GND3E-2	
P61	34	-12VS-1	
P61	35	-12VS-2	
P61	37	+22VS-1	
P61	38	+22VS-2	
P61	40	+12VS-1	
P61	41	+12VS-2	
P61	43	+26VS-1	
P61	44	+26VS-2	
P61	45	+26VC-1	
P61	46	+26VC-2	
P61	48	LOGIC BUSS	
P61	49	LOGIC BUSS	
P62	1	INPUT PAC 1A.2A	
P62	3	INPUT MSD 1A	
P62	5	INPUT MSD 2A	
P62	7	INPUT SD1A	
P62	9	INPUT SD2A	
P62	11	INPUT SD 3A.4A	
P62	13	INPU 0.5A SW1A	
P62	15	INPUT 0.5A SW2A	
P62	19	INPUT MSD 1B	
P62	21	INPUT MSD 2B	
P62	23	INPUT SD1B	
P62	25	INPUT SD2B	
P62	27	INPUT SD 3B.4B	
P62	29	INPUT 0.5A SW1B	
P62	31	INPUT 0.5A SW2B	
P62	34	INPUT PAC 5A.6A	
P62	38	NO GO	
P62	39	NO GO RET	
P62	41	CM-SM PWR XFER-1	TM INPUT
P62	42	CL OX ISOL VAL-1	TM INPUT
P62	43	ENABLE CM RCS -1	TM INPUT
P62	44	CM-SM RCS XFER-1	TM INPUT
P62	45	ENABLE SM RCS -1	TM INPUT
P62	46	SM+X JETS 1-1	TM INPUT
P62	47	SM+X JETS 2-1	TM INPUT
P62	48	CL FL ISOL VAL-1	TM INPUT
P63	11	LIFTOFF	A15J35-5
P63	12	ET OFF	A15J35-6
P63	13	AUTO ABT ENABLE	A15J35-17
P63	14	EDS ABT SIG 1	A15J35-15
P63	15	EDS ABT SIG 2	A15J35-11
P63	16	ENS ABT SIG 3	A15J35-8

P63 17	OX DMP ENABLE	A25J35-20
P63 18	24K BARO SW CLOS	A15J35-9
P63 19	11K BARO SW CLOS	A15J35-4
P63 20	Z-SPARE 1	
P63 21	TRNS CNT RTO CCW	A15J35-39
P63 22	LMSLA SEP INIT	A15J35-56
P63 23	CM SM SEP INIT	A15J35-50
P63 24	ELS ENABLE ON	A15J35-44
P63 25	TEST SW ON	A15J35-38
P63 26	TEST SW OFF	A15J35-32
P63 27	OUTPUT SW RESET	A15J35-26
P63 28	Z-SPARE 2	
P63 29	Z-SPARE 3	
P63 30	Z-SPARE 4	
P64 1	PAC-1 MAST PWR	A6J23 H
P64 2	PAC-1 SLAVE PWR	A6J23 E53
P64 3	PAC-2 MAST PWR	A6J23 J
P64 4	PAC-2 SLAVE PWR	A6J23 E52
P64 5	PAC-5 MAST PWR	A7J23A H
P64 6	PAC-5 SLAVE PWR	A7J23A E44
P64 7	CM-SM PWR XFER	MSD 1 OUTPUT
P64 8	CL OX ISOL VAL	SD 1 OUTPUT
P64 9	CM-SM RCS XFER	MSD 2 OUTPUT
P64 10	CM-SM RCS XFER	TO G AND N
P64 11	ENABLE CM RCS	0.5A SW 1 OUTPUT
P64 12	CL FL ISOL VAL	SD 2 OUTPUT
P64 13	SM X JETS 1	SD 3 PUTPUT
P64 14	SM X JETS 2	SD 4 OUTPUT
P64 15	SM X JETS 1	TO G AND N
P64 16	SM X JETS 2	TO SCS
P64 17	ENABLE SN RCS	0.5A SW 2 OUTPUT
P64 18	PAC-6 MAST PWR	A7J23A J
P64 19	PAC-6 SLAVE PWR	A7J23A E43
P64 20	GND 5	TB1 17
P64 21	GND 5	TB1 19
P64 22	PPCC-1 MAST PWR	A6J23 B
P64 23	CM-SM P XFER RET	
P64 24	CL OX ISOL V RET	
P64 25	CM-SM RCS XF RET	
P64 26	CM-SM RCS XF RET	
P64 27	EN CM RCS RET	
P64 28	CL FL ISOL V RET	
P64 29	SM X JETS 1 RET	
P64 30	SM X JETS 2 RET	
P64 31	SM X JETS 1 RET	
P64 32	SM X JETS 2 RET	
P64 33	EN SM RCS RET	
P64 34	PPCC-1 SLAVE PWR	A6J23 E55
P64 35	PPCC-2 MAST PWR	A7J24A B
P64 36	PPCC-2 SLAVE PWR	A7J24A E8
P64 37	PPCC-3 MAST PWR	A7J24A D
P64 38	PPCC-3 SLAVE PWR	A7J24A E9
P64 39	PPCC-4 MAST PWR	A6J24 J
P64 40	PPCC-4 SLAVE PWR	A6J24 E17
P64 41	PPCC-5 MAST PWR	A7J23A B
P64 42	PPCC-5 SLAVE PWR	A7J23A E45
P64 43	PPCC-6 MAST PWR	A6J24 B
P64 44	PPCC-6 SLAVE PWR	A6J2J E16
P64 45	PPCC-4 MAST PWR	A8J23 H
P64 46	PPCC-4 SLAVE PWR	A8J23 E35
P64 47	LOGIC BUSS	E24
P64 48	LOGIC BUSS	E25

P64	49	GND 4	E28
P64	50	GND 4	E29
TB1	2	LMD PROBE RTR 1	
TB1	3	MAIN CHUTE DIS	
TB1	32	LMD PROBE RTR F	
TB1	33	CLOSE LM PRES V	
TB1	34	LANYARD SW CL	

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