

1050012



10209800-1		10209800-2				10209800-3				10209800-4		10209800-5			
P/LW		P/MW				P/SW				S/LW		S/SW			
A	J01	J02	J01	J02	J03	J04	J01	J02	J03	J04	J05	J06	J01	J05	J06
B	E1	R1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	R1	TBD	TBD
C	E2	A8	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	T1	TBD	TBD
D	E3	A7	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C1	TBD	TBD
E	E4	A6	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DK1	TBD	TBD
F	D1	A9	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B1	TBD	TBD
G	D2	C9	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	D1	TBD	TBD
H	D3	B8	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	E1	TBD	TBD
I	D4	B7	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	A1	TBD	TBD
J	C1	C7	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C2	TBD	TBD
K	C3	B5	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	O2	TBD	TBD
L	C5	B6	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B2	TBD	TBD
M	T2	A5	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	E2	TBD	TBD
N	T1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	A2	TBD	TBD
O	C6	B4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C3	TBD	TBD
P	C8	C4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	O3	TBD	TBD
Q	D5	B3	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B3	TBD	TBD
R	D6	C2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	E3	TBD	TBD
S	D7	B2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C4	TBD	TBD
T	U8	B1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DK2	TBD	TBD
U	E7	A3	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	D4	TBD	TBD
V	E6	A4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C5	TBD	TBD
W	E8	A1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B4	TBD	TBD
X	DK2	DK1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	A3	TBD	TBD
Y	E9	A2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	T2	TBD	TBD
Z	E9	A2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	T2	TBD	TBD
AA	HSJFP1	HSJFP1	HSJFP2	HSJFP2	HSJFP3	HSJFP3	HSJFP4	HSJFP4	HSJFP5	HSJFP5	HSJFP6	HSJFP6	HSJFS1	HSJFS2	HSJFS2
BB	J01	J04	J01	J04	J01	J04	J01	J04	J01	J04	J01	J04	J01	J04	J04
CC	HSJFP1	HSJFP1	HSJFP2	HSJFP2	HSJFP3	HSJFP3	HSJFP4	HSJFP4	HSJFP5	HSJFP5	HSJFP6	HSJFP6	HSJFS1	HSJFS2	HSJFS2
DD	J05	J08	J05	J08	J05	J08	J05	J08	J05	J08	J05	J08	J05	J08	J08
	HSJFP1	HSJFP1	HSJFP2	HSJFP2	HSJFP3	HSJFP3	HSJFP4	HSJFP4	HSJFP5	HSJFP5	HSJFP6	HSJFP6	HSJFS1	HSJFS2	HSJFS2
	J06	J07	J06	J07	J06	J07	J06	J07	J06	J07	J06	J07	J06	J07	J07
FPU HARNESS	7	8	9	10	11	12	1	2	3	4	5	6	15	13	14
CRYO HARNESS	6	6	5	5	4	4	9	9	8	8	7	7	1	2	2

- UNLESS OTHERWISE NOTED, \perp IS JFET CHASSIS GROUND.
 - JFET MEMBRANE HEATER IS 0.0204 TIMES THE SOURCE RESISTOR.
 - ALL RESISTORS HAVE A TOLERANCE OF $\pm 20\%$.
 - THIS TECHNICAL DATA IS EXPORT CONTROLLED UNDER U.S. LAW AND IS BEING TRANSFERRED BY JPL TO PPARC PURSUANT TO THE NASA / PPARC LETTER OF AGREEMENT WHICH ENTERED INTO FORCE ON DECEMBER 2, 1993. THIS TECHNICAL DATA IS TRANSFERRED TO PPARC FOR USE EXCLUSIVELY ON THE NASA/PPARC SPIRE ON JOINT COOPERATIVE PROJECT, MAY NOT BE USED FOR ANY OTHER PURPOSE, AND SHALL NOT BE RE-TRANSFERRED OR DISCLOSED TO ANY OTHER PARTY WITHOUT THE PRIOR WRITTEN APPROVAL OF NASA.
- NOTES: UNLESS OTHERWISE SPECIFIED

METRIC

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

LINEAR TOLERANCES

DATE: 10/20/97

SCALE: 1:1

RELEASED: 10/20/97

CONTRACT NO. 30322

JET PROPULSION LABORATORY

WIRING SCHEMATIC, SPIRE

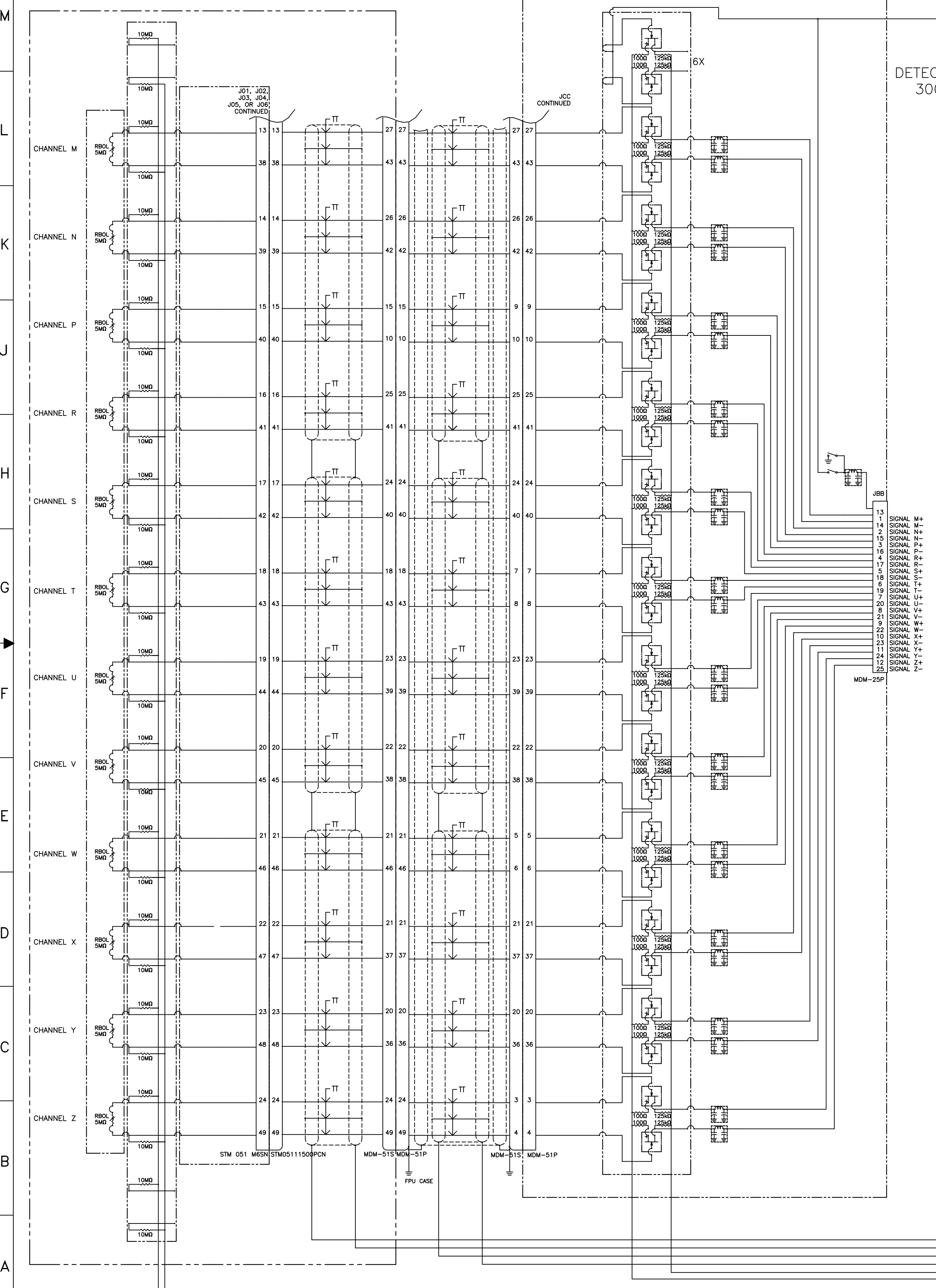
REV: 1

1 OF 2

23835

10209725

1050012



J01, J02,
J03, J04,
J05, OR J06;
CONTINUED

JCC
CONTINUED

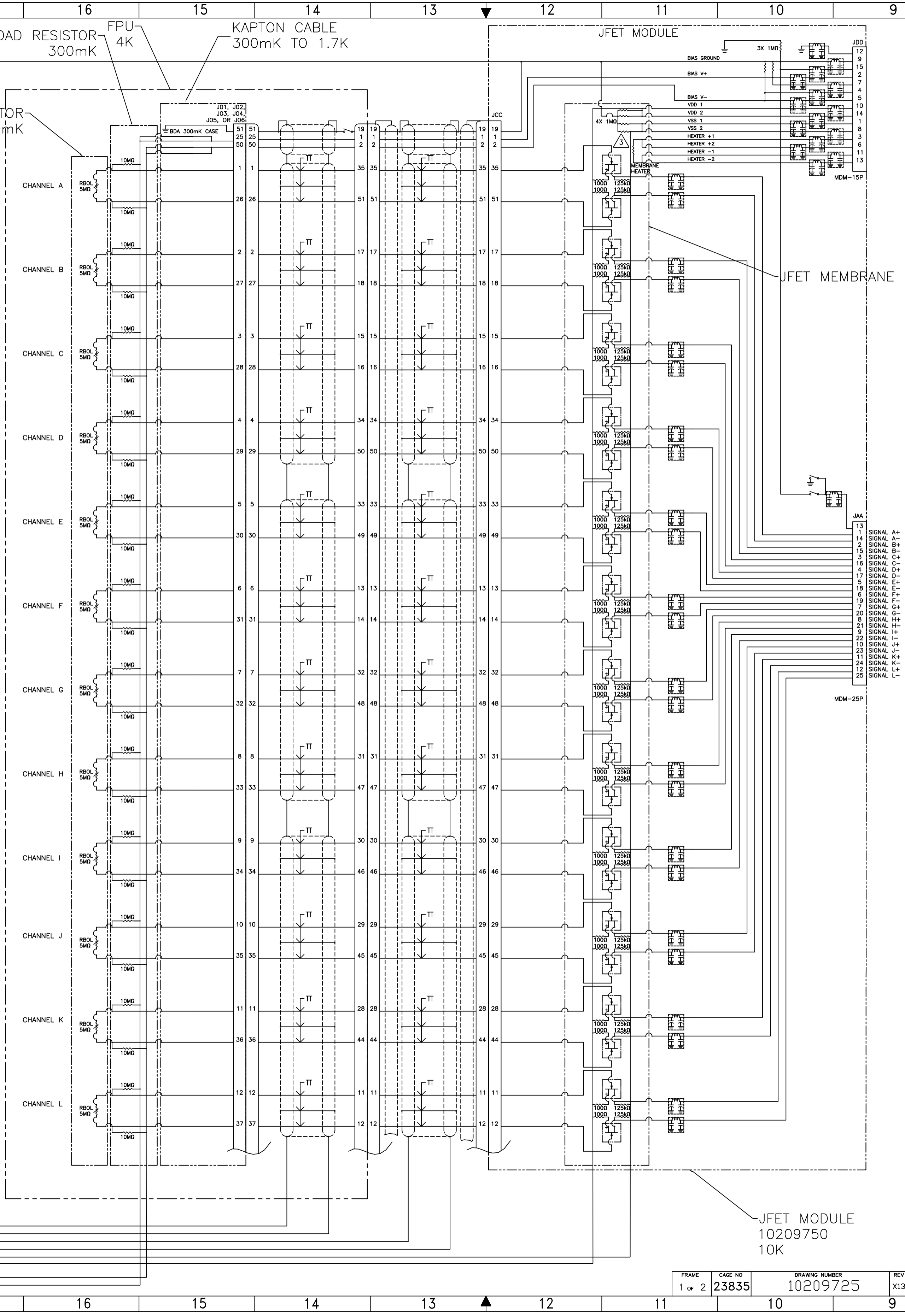
JBB

MDM-25P

FPU CASE

STM 051 M6SN STM05111500PCN MDM-51S MDM-51P MDM-51S MDM-51P

- 13 SIGNAL M+
- 14 SIGNAL M-
- 2 SIGNAL N+
- 15 SIGNAL N-
- 3 SIGNAL P+
- 16 SIGNAL P-
- 4 SIGNAL R+
- 17 SIGNAL R-
- 5 SIGNAL S+
- 18 SIGNAL S-
- 6 SIGNAL T+
- 19 SIGNAL T-
- 7 SIGNAL U+
- 20 SIGNAL U-
- 8 SIGNAL V+
- 21 SIGNAL V-
- 9 SIGNAL W+
- 22 SIGNAL W-
- 10 SIGNAL X+
- 23 SIGNAL X-
- 11 SIGNAL Y+
- 24 SIGNAL Y-
- 12 SIGNAL Z+
- 25 SIGNAL Z-



REVISIONS												DWN	CHK	STRUCT	MATL	THRM CONT	ENGR	DSGN SUPV	DATA MGT	RELEASE DATE
LTR	ZONE	DESCRIPTION										CODE								
A		INITIAL RELEASE										B	SEE TITLE BLOCK							

	10209800-1 P/LW		10209800-2 P/MW				10209800-3 P/SW						10209800-4 S/LW		10209800-5 S/SW	
	J01	J02	J01	J02	J03	J04	J01	J02	J03	J04	J05	J06	J01	J05	J06	
A	E1	R1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	R1	TBD	TBD	
B	E2	A8	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	T1	TBD	TBD	
C	E3	A7	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C1	TBD	TBD	
D	E4	A6	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DK1	TBD	TBD	
E	D1	A9	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B1	TBD	TBD	
F	D2	C9	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	D1	TBD	TBD	
G	D3	B8	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	E1	TBD	TBD	
H	D4	B7	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	A1	TBD	TBD	
I	C1	C7	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C2	TBD	TBD	
J	C3	B5	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	D2	TBD	TBD	
K	C5	B6	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B2	TBD	TBD	
L	T2	A5	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	E2	TBD	TBD	
M	E5	T1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	A2	TBD	TBD	
N	C6	B4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C3	TBD	TBD	
P	C8	C4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	D3	TBD	TBD	
R	D5	B3	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B3	TBD	TBD	
S	D6	C2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	E3	TBD	TBD	
T	D7	B2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C4	TBD	TBD	
U	D8	B1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DK2	TBD	TBD	
V	E7	A3	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	D4	TBD	TBD	
W	E6	A4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	C5	TBD	TBD	
X	E8	A1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	B4	TBD	TBD	
Y	DK2	DK1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	A3	TBD	TBD	
Z	E9	A2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	T2	TBD	TBD	
AA	HSJFP1 J01	HSJFP1 J04	HSJFP2 J01	HSJFP2 J04	HSJFP3 J01	HSJFP3 J04	HSJFP4 J01	HSJFP4 J04	HSJFP5 J01	HSJFP5 J04	HSJFP6 J01	HSJFP6 J04	HSJFS1 J01	HSJFS2 J01	HSJFS2 J04	
BB	HSJFP1 J02	HSJFP1 J03	HSJFP2 J02	HSJFP2 J03	HSJFP3 J02	HSJFP3 J03	HSJFP4 J02	HSJFP4 J03	HSJFP5 J02	HSJFP5 J03	HSJFP6 J02	HSJFP6 J03	HSJFS1 J02	HSJFS2 J02	HSJFS2 J03	
CC	HSJFP1 J05	HSJFP1 J08	HSJFP2 J05	HSJFP2 J08	HSJFP3 J05	HSJFP3 J08	HSJFP4 J05	HSJFP4 J08	HSJFP5 J05	HSJFP5 J08	HSJFP6 J05	HSJFP6 J08	HSJFS1 J05	HSJFS2 J05	HSJFS2 J08	
DD	HSJFP1 J06	HSJFP1 J07	HSJFP2 J06	HSJFP2 J07	HSJFP3 J06	HSJFP3 J07	HSJFP4 J06	HSJFP4 J07	HSJFP5 J06	HSJFP5 J07	HSJFP6 J06	HSJFP6 J07	HSJFS1 J06	HSJFS2 J06	HSJFS2 J07	
FPU HARNESS	7	8	9	10	11	12	1	2	3	4	5	6	15	13	14	
CRYO HARNESS	6	6	5	5	4	4	9	9	8	8	7	7	1	2	2	

4. UNLESS OTHERWISE NOTED, \perp IS JFET CHASIS GROUND.

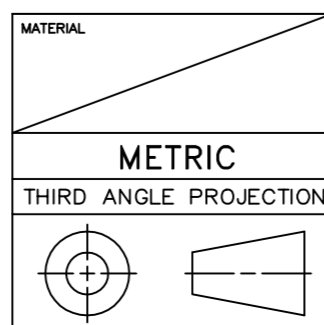
3. JFET MEMBRANE HEATER IS 0.0204 TIMES THE SOURCE RESISTOR.

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NOTES: UNLESS OTHERWISE SPECIFIED

SH NO 1



QTY REQD	ITEM NO	REF DES	CAGE NO	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL OR NOTE	ZONE
PARTS LIST								
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS					CONTRACT NO 960939		JET PROPULSION LABORATORY CALIFORNIA INSTITUTE OF TECHNOLOGY PASADENA, CA 91109 RELEASED THROUGH EDMC	
LINEAR TOLERANCES:					APPD _____ DATE _____		WIRING SCHEMATIC, SPIRE	
0-6 ± 0.1					DWN D CRUMB 5/13/01			
OVER 6-30 ± 0.2					CHK _____			
OVER 30-120 ± 0.3					STRUCT _____			
OVER 120-315 ± 0.5					MATL _____			
OVER 315-1000 ± 0.8					THRM CONT _____		SIZE _____ CAGE NO 10209725 REV X13	
OVER 1000 ± 1.2					ENGR _____		SCALE NONE UNCLASSIFIED SHEET 1 OF 1	
ANGULAR TOLERANCES: ± 0.5°					DSGN SUPV _____		REV 2/00	
MACHINE FINISH 3.2 (MICROMETERS)								
DO NOT SCALE DRAWING INTERPRET DWG PER ANSI Y14.100M								
APPLICATION								