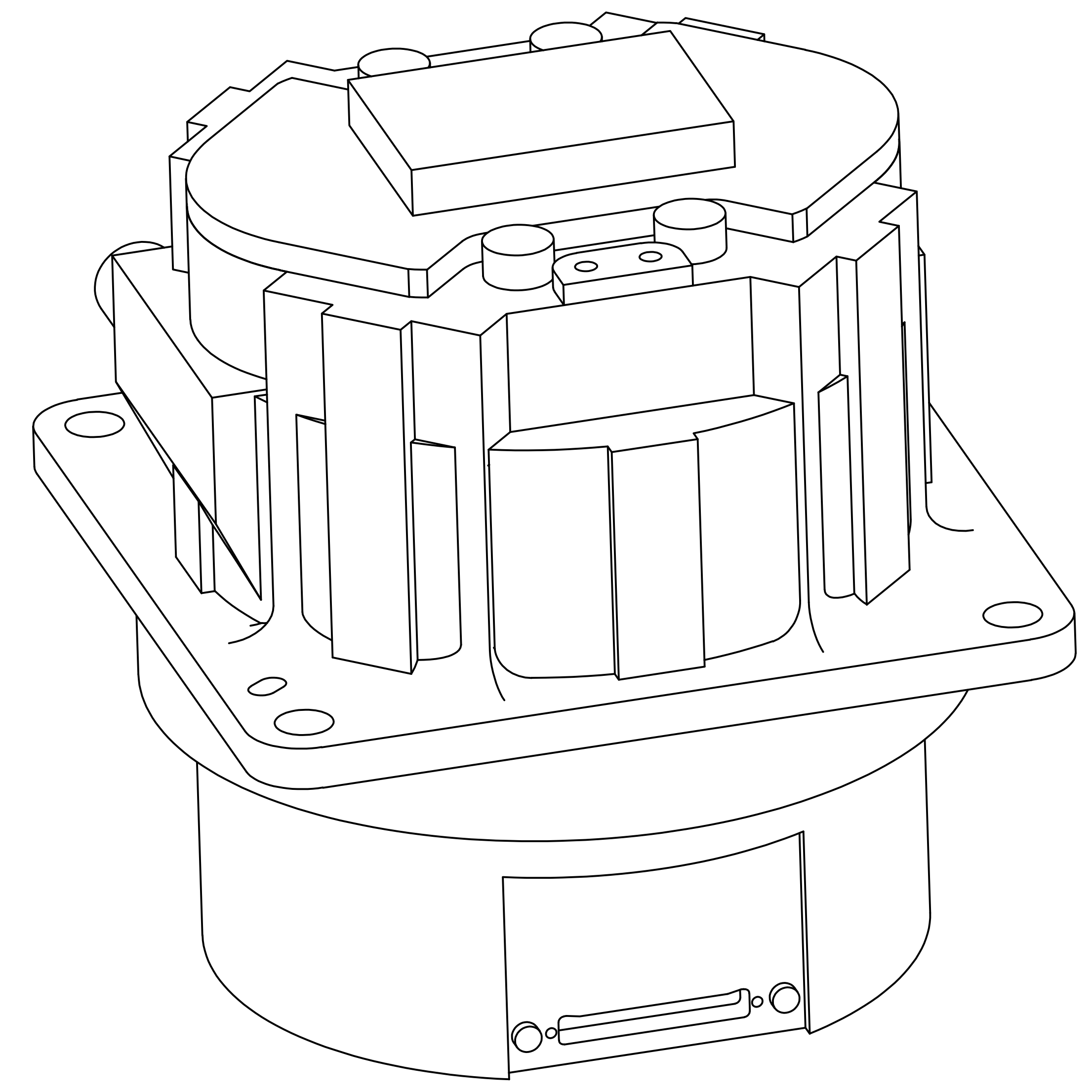


LTR		ZONE		REVISIONS									
DESCRIPTION	CODE	DWN	CHK	STRUCT	MATL	THRM	ENGR	DSGN	DATA	RELEASE	DATE		
INITIAL RELEASE	B												
SEE TITLE BLOCK													

SUBSYSTEM INTERFACE DATA			
UNIT: SUSPENDED STM			
NUMBER: 10209800-9			
FOCUS: N/A			
CONNECTOR POSITIONS USED: J05, J06			
MECHANICAL CHARACTERISTICS			
MASS: 640			
C.O.G. LOCATION W.R.T. LOCATION HOLE:	X	34.5	Y 24.3 Z 4.42
MOMENT OF INERTIA:	$I_x 2.3 \times 10^{-4} \text{ KG MM}^2$	$I_y 2.3 \times 10^{-4} \text{ KG MM}^2$	$I_z 4.6 \times 10^{-4} \text{ KG MM}^2$
MECHANICAL INTERFACE MATERIAL: 7075 AL			
SURFACE FINISH DESCRIPTION: CHEM FILM GOLD			
TOTAL CONTACT AREA: 1783 mm ²			
R.M.S. ROUGHNESS OF CONTACT AREA: 3.2 μm			
THERMAL STRAP INTERFACE MATERIAL: OFHC			
THERMAL STRAP SURFACE FINISH DESCRIPTION: BARE			
THERMAL STRAP CONTACT AREA: 57.5 mm ²			
THERMAL STRAP R.M.S. ROUGHNESS OF CONTACT AREA: 3.2 μm			

ALL CONNECTORS					
PIN #	PIN PURPOSE	PIN #	PIN PURPOSE	PIN #	PIN PURPOSE
1	SIMULATOR 1A	18	SIMULATOR 18A	35	SIMULATOR 10B
2	SIMULATOR 2A	19	SIMULATOR 19A	36	SIMULATOR 11B
3	SIMULATOR 3A	20	SIMULATOR 20A	37	SIMULATOR 12B
4	SIMULATOR 4A	21	SIMULATOR 21A	38	SIMULATOR 13B
5	SIMULATOR 5A	22	SIMULATOR 22A	39	SIMULATOR 14B
6	SIMULATOR 6A	23	SIMULATOR 23A	40	SIMULATOR 15B
7	SIMULATOR 7A	24	SIMULATOR 24A	41	SIMULATOR 16B
8	SIMULATOR 8A	25	SIMULATOR BIAS V+	42	SIMULATOR 17B
9	SIMULATOR 9A	26	SIMULATOR 1B	43	SIMULATOR 18B
10	SIMULATOR 10A	27	SIMULATOR 2B	44	SIMULATOR 19B
11	SIMULATOR 11A	28	SIMULATOR 3B	45	SIMULATOR 20B
12	SIMULATOR 12A	29	SIMULATOR 4B	46	SIMULATOR 21B
13	SIMULATOR 13A	30	SIMULATOR 5B	47	SIMULATOR 22B
14	SIMULATOR 14A	31	SIMULATOR 6B	48	SIMULATOR 23B
15	SIMULATOR 15A	32	SIMULATOR 7B	49	SIMULATOR 24B
16	SIMULATOR 16A	33	SIMULATOR 8B	50	SIMULATOR BIAS V-
17	SIMULATOR 17A	34	SIMULATOR 9B	51	SIMULATOR BIAS GND



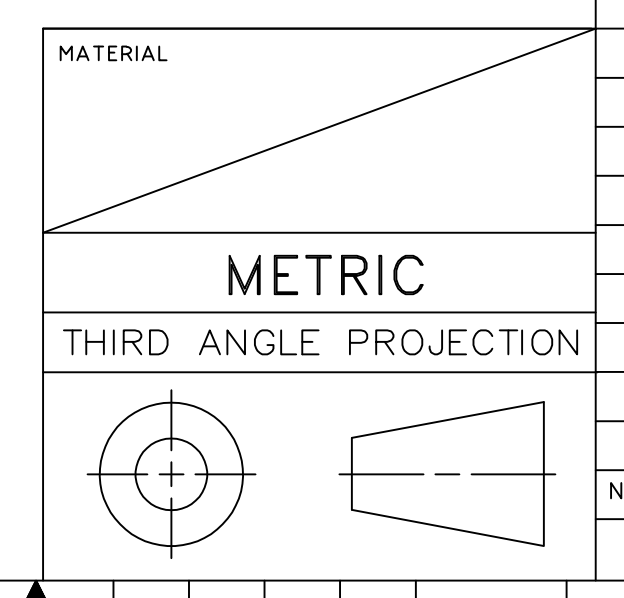
GENERAL VIEW
REFERENCE ONLY

9. WIRING IS IDENTICAL TO DRAWING 10209721 EXCEPT BOLOMETER IS REPLACED WITH A 5mΩ RESISTOR.
8. REFER TO SUBSYSTEM INTERFACE DATA TABLE FOR INFORMATION.
7. SINGLE AXIS ACCELEROMETER INSTALLED INTERNAL TO VOLUME. ACCELEROMETER CABLE HAS A 10-32 COAXIAL CONNECTOR ON THE END OF A 150MM LEAD EXITING IN APPROXIMATE POSITION SHOWN.
6. ALL DIMENSIONS SHOWN FOR THE 300mK STAGE ARE FOR THE NOMINAL SUSPENDED POSITION. THE SUSPENDED UNIT MAY BE SHIFTED FROM NOMINAL POSITION ±0.5mm IN ANY AXIS.
5. DIMENSIONS IN {} ARE CALCULATED FOR OPERATING TEMPERATURE AND ARE PROVIDED FOR REFERENCE ONLY. ALL OTHER DIMENSIONS ARE BASED ON AN ASSEMBLY TEMPERATURE OF 20° C.
4. INDICATES CONNECTOR POSITION. CONNECTORS INSTALLED ARE NANONIC STM 051 M6SN. UNIT PROVIDED WITH BOLOMETER SIMULATORS IN CONNECTOR POSITIONS.
3. ASSEMBLY REFERENCE DESIGNATOR, TITLE, PART NUMBER, REVISION LETTER, AND SERIAL NUMBER TO APPEAR AS SHOWN IN THIS AREA.
2. THIS IS THE INTERFACE CONTROL DRAWING FOR THE BOLOMETER DETECTOR ARRAY MASS SIMULATOR, JPL PART NUMBER 10209800-9. JPL DRAWING NUMBER 10209800-9 SHALL CONTAIN THE FOLLOWING NOTE: THIS ASSEMBLY MEETS THE INTERFACE REQUIREMENTS OF JPL INTERFACE CONTROL DRAWING 10209728.
1. 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, 1999. THIS TECHNICAL DATA IS TRANSFERRED TO PPARC FOR USE EXCLUSIVELY ON THE NASA/PPARC SPIRE ON FIRST 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

INTERFACE DRAWING

QTY REQD	ITEM NO	REF DES	CAGE NO	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL OR NOTE	ZONE
PARTS LIST								
					CONTRACT NO 960939	JET PROPULSION LABORATORY CALIFORNIA INSTITUTE OF TECHNOLOGY PASADENA, CA 91109		
					APPD DATE	RELEASED THROUGH EDMG		
					DWN D. WATERBURY 12/5/02	BOLOMETER DETECTOR ARRAY, MASS SIMULATOR MECHANICAL ID, SPIRE		
					CHK	SIZE	CAGE NO	REV
					STRUCT	A1	23835	10209728
					MATL	SCALE	NONE	[UNCLASSIFIED]
					THRM CONT	SHEET	1	OF 2
					MSSL	REV	A	2/00
					ENGR			
					DSGN SUPV			



MATERIAL

METRIC

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

LINEAR TOLERANCES:

0-6 ± 0.1
 OVER 6-30 ± 0.2
 OVER 30-120 ± 0.3
 OVER 120-315 ± 0.5
 OVER 315-1000 ± 0.8
 OVER 1000 ± 1.2

ANGULAR TOLERANCES:
 ± 0.5°

MACHINE FINISH (MICROMETERS) ✓
 DO NOT SCALE DRAWING
 INTERPRET DWG PER ASME Y14.100M

SPIRE
 NEXT ASSEMBLY USED ON

APPLICATION

A1 10209728
AutoCAD GENERATED

