

SSTD Incoming Inspection Report

Spacecraft/Project **HERSCHEL / SPIRE**

Document Number **SPIRE-RAL-REP- 002556**

Issue **1.0**

Sub System **JFETS SN 22 & 23**

Date **19-Dec-05**

Model **PFM**

INCOMING INSPECTION REPORT

FROM
<p>JPL 4800 Oak Grove Drive, Pasadena, California 91109, USA</p>

TO
<p>Project Rutherford Appleton Laboratory Space Science and Technology Department Chilton DIDCOT OXON OX11 0QX</p>

Applicable sections	
Containers	Yes
External Visual Inspection	Yes
External Connector	Yes
Documentation	Yes
Verification of Interfaces	No
Extra Comments Sheets	Yes

Drawings / Documents Attached
Photos
Electrical Test JFET Sn 22
Electrical Test JFET Sn 23

INSPECTION CONDUCTED BY

WITNESS BY

NAME
Doug Griffin

DATE
19/12/2005

NAME
Valereen Essandoh

DATE
19/12/2005

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CONTAINER INSPECTION

TRANSPORT CONTAINERS EXTERNAL CONDITION	REMARKS	Status
Mechanical damage to container fasteners, locks, clips or handling provisions		Checked
Security / Locking Fitted	QA Seal unbroken upon reception at RAL	See Remarks
Markings for destination and description	Hand carried	Checked
Warning labels relating to handling lifting and stacking limits		None
Any additional Comments		None

TRANSPORT CONTAINERS INTERNAL CONDITION	REMARKS	Status
Check Mounting fixtures fitted internal packaging		None
Internal padding / packaging required		Checked
Mounting provisions secure		N/A
Any additional Comments		

ENVIROMENTAL MONITORS									
Temp Monitors		Humidity Monitors		Shock Sensors Triggerd Information					
Fitted:	<input type="text" value="No"/>	Fitted:	<input type="text" value="No"/>	5g	10g	15g			
Condition:	<input type="text" value="N/A"/>	Condition:	<input type="text" value="N/A"/>	20g	50g				
				X Axis	N/F	tripped	N/F	OK	OK
				Y Axis	N/F	tripped	N/F	OK	OK
				Z Axis	N/F	N/F	N/F	N/F	N/F

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INSTRUMENT VISUAL INSPECTION

CHECK LIST	REMARKS	RESULTS
Contents against shipping list		Correct
Instrument label		Correct
Note status of external contamination		Acceptable
Degradation of paintwork or Coating?		Acceptable
Fasteners correctly locked?		N/A
Check protective covers are correctly labelled and fitted?		N/A
Additional Comments		None

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INSPECTION OF ALL CONNECTORS

CHECK LIST	REMARKS (LIST CONNECTOR NUMBERS)	RESULTS
Pin Alignment	To be inspected at a later date	See remark
Damaged Sockets	To be inspected at a later date	See remark
Internal Debris	To be inspected at a later date	See remark
Connector Covers fitted		Pass
Connector Savers Fitted		Pass
EMC Covers Fitted		None
RED Tag Item / Green Tag Items fitted	Safing plugs /savers to be removed prior to flight	See remark
Additional Comments		None

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DOCUMENTATION CHECK LIST

Check	REMARKS	RESULTS
End Item Data Pack	HRCR Included	Yes
Transportaion Documents		Yes
Packing un- Packing instructions		Yes
Additional Comments		

Verification of Interfaces

Mechanical interface: dimensions specified in the interface control documents such as mass, flatness of surfaces, location of fixing holes and overall dimensions should be measured accurately and recorded. Record Test Report Number, or confirm that measurement result is included in delivery documentation, (EIDP).

INSPECTION / TEST REPORT NUMBER	CHECKED N/A for this inspection
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Electrical interfaces: verifying the location and types of connectors against interface control document is normally carried as part of mechanical verification, confirm this has been done. Functional testing: final functional test report number should be noted.

INSPECTION / TEST REPORT NUMBER	CHECKED Yes
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Date	19-Dec-05
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Model	PFM
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EXTRA COMMENT SHEET

Note the JFETS are integrated into the JFET rack so no Mechanical dimensions or Mass measurement was made

SPIRE JFET Health Check Test Sheet

JFET Module S/N	SN 022
DVM S/N	Fluke 73 S/N RAL 43369
Calibration Date	04-Aug-05
Current Meter	Fluke 87 V
Calibration date	N/A
Power Supply S/N	Tti CPX 200 223637
Calibration Date	27-Jan-05
Date of Test	19-Dec-05
Test Engineer	Griffin
Witness	Valereen
Vdd at pins 9(gnd) and 14	3.00 V
Vss pins 9 (gnd) and 8	-1.51 V

Board SN	SN 055	Board SN	SN 056
Idd	1.2100 mA	Idd	1.2800 mA
Iss	1.1610 mA	Iss	1.2300 mA
Delta	49.0 uA	Delta	50.0 uA

Name	Pin	JAA	Offset	JBB	Offset	JAA'	Offset	JBB'	Offset
Channel 1 +	01	1.2080 V	5.0 mV	1.1470 V	1.0 mV	1.1780 V	-1.0 mV	1.1660 V	-3.0 mV
Channel 1 -	14	1.2030 V		1.1460 V		1.1790 V		1.1690 V	
Channel 2 +	02	1.1890 V	-9.0 mV	1.1970 V	1.0 mV	1.1690 V	5.0 mV	1.1620 V	-1.0 mV
Channel 2 -	15	1.1980 V		1.1960 V		1.1640 V		1.1630 V	
Channel 3 +	03	1.2580 V	-2.0 mV	1.1570 V	3.0 mV	1.2540 V	-3.0 mV	1.2200 V	0.0 mV
Channel 3 -	16	1.2600 V		1.1540 V		1.2570 V		1.2200 V	
Channel 4 +	04	1.1230 V	1.0 mV	1.5280 V	6.0 mV	1.1530 V	0.0 mV	1.1690 V	1.0 mV
Channel 4 -	17	1.1220 V		1.5220 V		1.1530 V		1.1680 V	
Channel 5 +	05	1.2240 V	-6.0 mV	1.1400 V	2.0 mV	1.1940 V	1.0 mV	1.1570 V	1.0 mV
Channel 5 -	18	1.2300 V		1.1380 V		1.1930 V		1.1560 V	
Channel 6 +	06	1.2640 V	0.0 mV	1.1700 V	3.0 mV	1.1900 V	4.0 mV	1.1780 V	1.0 mV
Channel 6 -	19	1.2640 V		1.1670 V		1.1860 V		1.1770 V	
Channel 7 +	20	1.2390 V	0.0 mV	1.1360 V	1.0 mV	0.9890 V	0.0 mV	0.9360 V	2.0 mV
Channel 7 -	07	1.2390 V		1.1350 V		0.9890 V		0.9340 V	
Channel 8 +	21	1.2680 V	1.0 mV	1.2300 V	-4.0 mV	1.2430 V	-2.0 mV	1.2720 V	3.0 mV
Channel 8 -	08	1.2670 V		1.2340 V		1.2450 V		1.2690 V	
Channel 9 +	22	1.1610 V	-6.0 mV	1.2500 V	1.0 mV	1.4090 V	-3.0 mV	1.2860 V	-4.0 mV
Channel 9 -	09	1.1670 V		1.2490 V		1.4120 V		1.2900 V	
Channel 10 +	23	1.2650 V	-4.0 mV	1.1060 V	0.0 mV	1.3050 V	2.0 mV	1.1600 V	3.0 mV
Channel 10 -	10	1.2690 V		1.1060 V		1.3030 V		1.1570 V	
Channel 11 +	24	1.2900 V	0.0 mV	1.1900 V	4.0 mV	1.1310 V	7.0 mV	1.2990 V	-5.0 mV
Channel 11 -	11	1.2900 V		1.1860 V		1.1240 V		1.3040 V	
Channel 12 +	25	1.2080 V	0.0 mV	1.0990 V	8.0 mV	1.2100 V	3.0 mV	1.1650 V	4.0 mV
Channel 12 -	12	1.2080 V		1.0910 V		1.2070 V		1.1610 V	

Chassis to gnd impednace o/c -checked

Chassis to gnd impedance o/c - checked

SPIRE JFET Health Check Test Sheet

JFET Module S/N	SN 023
DVM S/N	Fluke 73 S/N RAL 43369
Calibration Date	04-Aug-05
Current Meter	Fluke 87 V
Calibration date	N/A
Power Supply S/N	Tti CPX 200 223637
Calibration Date	27-Jan-05
Date of Test	19-Dec-05
Test Engineer	Griffin
Witness	Valereen
Vdd at pins 9(gnd) and 14	3.00 V
Vss pins 9 (gnd) and 8	-1.51 V

Board SN	SN 054	Board SN	SN 057
Idd	1.2100 mA	Idd	1.2580 mA
Iss	1.1610 mA	Iss	1.2080 mA
Delta	49.0 uA	Delta	50.0 uA

Name	Pin	JAA	Offset	JBB	Offset	JAA'	Offset	JBB'	Offset
Channel 1 +	01	0.8080 V	-4.0 mV	0.6240 V	2.0 mV	1.2130 V	-2.0 mV	1.1780 V	-4.0 mV
Channel 1 -	14	0.8120 V		0.6220 V		1.2150 V		1.1820 V	
Channel 2 +	02	0.8150 V	-1.0 mV	0.8180 V	-4.0 mV	1.1600 V	3.0 mV	1.1730 V	3.0 mV
Channel 2 -	15	0.8160 V		0.8220 V		1.1570 V		1.1700 V	
Channel 3 +	03	0.6190 V	4.0 mV	0.8330 V	-2.0 mV	1.1920 V	0.0 mV	1.2030 V	0.0 mV
Channel 3 -	16	0.6150 V		0.8350 V		1.1920 V		1.2030 V	
Channel 4 +	04	0.8510 V	-1.0 mV	1.0780 V	-6.0 mV	1.2110 V	-2.0 mV	1.1610 V	-1.0 mV
Channel 4 -	17	0.8520 V		1.0840 V		1.2130 V		1.1620 V	
Channel 5 +	05	0.6450 V	-3.0 mV	1.2390 V	-10.0 mV	1.2560 V	-11.0 mV	1.3410 V	-1.0 mV
Channel 5 -	18	0.6480 V		1.2490 V		1.2670 V		1.3420 V	
Channel 6 +	06	0.8250 V	0.0 mV	0.9470 V	0.0 mV	1.1370 V	1.0 mV	1.2580 V	-3.0 mV
Channel 6 -	19	0.8250 V		0.9470 V		1.1360 V		1.2610 V	
Channel 7 +	20	0.7360 V	-3.0 mV	0.8790 V	-3.0 mV	1.2110 V	5.0 mV	1.2790 V	-3.0 mV
Channel 7 -	07	0.7390 V		0.8820 V		1.2060 V		1.2820 V	
Channel 8 +	21	0.9980 V	8.0 mV	0.8920 V	1.2 mV	1.1530 V	1.0 mV	1.1630 V	0.0 mV
Channel 8 -	08	0.9900 V		0.8970 V		1.1520 V		1.1630 V	
Channel 9 +	22	1.1080 V	0.0 mV	0.7320 V	-5.0 mV	1.2060 V	-2.0 mV	1.2090 V	1.0 mV
Channel 9 -	09	1.1080 V		0.7370 V		1.2080 V		1.2080 V	
Channel 10 +	23	0.6980 V	4.0 mV	0.8240 V	0.0 mV	1.1560 V	3.0 mV	1.2000 V	-3.0 mV
Channel 10 -	10	0.6940 V		0.8240 V		1.1530 V		1.2030 V	
Channel 11 +	24	1.3420 V	10.0 mV	0.8370 V	0.0 mV	1.1830 V	-2.0 mV	1.1550 V	-2.0 mV
Channel 11 -	11	1.3320 V		0.8370 V		1.1850 V		1.1570 V	
Channel 12 +	25	1.6940 V	13.0 mV	0.5520 V	13.0 mV	1.2540 V	-1.0 mV	1.2920 V	3.0 mV
Channel 12 -	12	1.6810 V		0.5390 V		1.2550 V		1.2890 V	

Chassis to gnd impednace o/c -checked

Chassis to gnd impedance o/c - checked





