Problem/Failure Report
THM_PFR_51

PFR-051 Title: LVPS IDPU ANALOG Reversed Capacitor

Assembly : LVPS	**SubAssembly :** FM3 (S/N 004)	
Component : C69	**Units Affected:** - - x - - -	**Units fixed:** - - x - - -
Originator: Selda Heavner		
Organization: UC Berkeley	**Date:** May 16, 2005	
Phone: 510-643-8640	**Email :** selda@ssl.berkeley.edu	

Failure Occurred During (Check one √)

√ Functional test □ Qualification test □ S/C Integration □ Launch operations □ Other (Flight Assy)

Environment when failure occurred:

√ Ambient □ Vibration □ Shock □ Acoustic
□ Thermal □ Vacuum □ Thermal-Vacuum □ EMI/EMC

Problem Description

THEMIS LVPS IDPU Analog Voltages suddenly dropped below their acceptance range during functional test.

Analyses Performed to Determine Cause

All LVPS sections that are powered by the IDPU Analog were disconnected. The correct voltages were then applied at each IDPU Analog Output Voltage while the UUT was off. When 10V was applied to the IDPU_PHRV tester points the bench supply started to current limit. When the output circuit of IDPU_PHRV was examined, we found that C69 was assembled in the reverse direction by Jackson & Tull.

Corrective Action/ Resolution

1) Replace C69 15μF capacitor. Part Number: CWR06KH156KBB. Record D/C in space provided below.

D/C: 0411

Completed By: Y. I **Date:** 05/17/05

RETEST RESULTS: Passed

RETESTED BY: Selda Heavner **Date:** 05/17/05

Acceptance:

Cognizant Engineer Selda Heavner Date: May 17, 2005

MSE: Ellen Taylor Date: 19 May 2005

MAM: Ron Jackson Ron Jackson Date: 5/23/05

PM: Peter Harvey Peter R Harvey Date: 5/23/05

Date of Closure 5/23/05