

PFR-157 Title: IDPU LVPS FM4 Thermistor Shorted Assembly : IDPU SubAssembly : LVPS **Component : Thermistor** Units Affected: Units fixed: **Originator:** Michael Ludlam 0 0 0 ^x 0 0 0 0 0 X 0 0 **Date:** 21st March 2006 **Organization:** UCB **Phone:** (510) 642-7732 **Email** : mludam@ssl.berkeley.edu **Failure Occurred During (Check one** $\sqrt{}$ $\sqrt{\text{Functional test}}$ \Box Qualification test \Box S/C Integration \Box Launch operations \Box Other (Flight Assy) **Environment when failure occurred**: √ Ambient □ Vibration □ Shock □ Acoustic Thermal □ Vacuum √ Thermal-Vacuum □ EMI/EMC **Problem Description**

During FM4 Instrument Suite Thermal Vacuum it was found that the LVPS thermistor was shorted. On removal of the suite from thermal vacuum the resistance across the thermistor was measured again and found to be still shorted.

Analyses Performed to Determine Cause

The LVPS cover was removed and the unit visually inspected for anything that could account for the short circuit. Nothing was found. The thermistor was gently cooled, but the short remained. One lead of the thermistor was cut and the short vanished.

Corrective Action/ Resolution

Thermistor RT1 was removed and replaced. The supply was tested to verify it was no longer shorted. The supply was staked and coated. See ECO 0010.

Acceptance: MAM: Ron Jackson ; MSE: Ellen Taylor

PM: Peter Harvey_____; Cognizant Engineer_____

Date of Closure