

PFR-036 Title: LVPS EFI Digital 2.5VD Connection Error

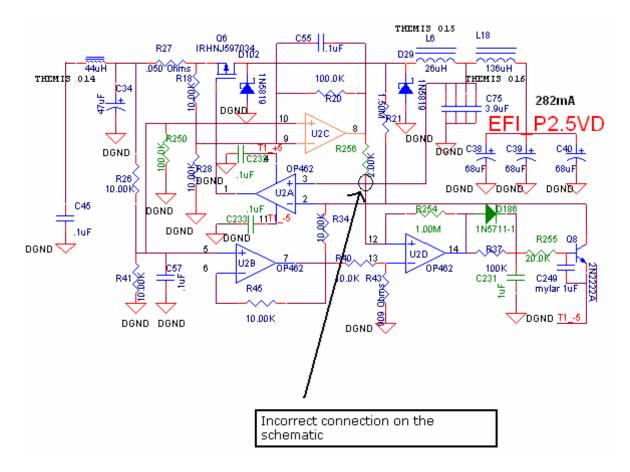
Assembly : LVPS	SubAssembly : FM1
Component : Layout error	Date: March 02, 2005
Originator: Selda Heavner	Organization: UC Berkeley
Phone : 510-643-8640	Email : selda@ssl.berkeley.edu

Failure Occurred During (Check one $\sqrt{}$)

$\sqrt{Functional test}$	□ Qualification test	□ S/C Integration	□ Launch operations			
Environment when failure occurred:						
$\sqrt{\text{Ambient}}$	□ Vibration	□ Shock				
□ Thermal	□ Vacuum	□ Thermal-Vacuum	□ EMI/EMC			

Problem Description

R256 (2.00K) is connected to U2 pin 3. The error on schematic connects pin 12 of U2 to Pin 3 of U2. At EFI_P2.5VD the voltage was not within the acceptable range.





Analyses Performed to Determine Cause

Due to a connection error on schematic R256 (2.00K) was connected to L18. R256 (2.00K) is connected to U2 pin 3. The error on schematic connects pin 12 of U2 to Pin 3 of U2.

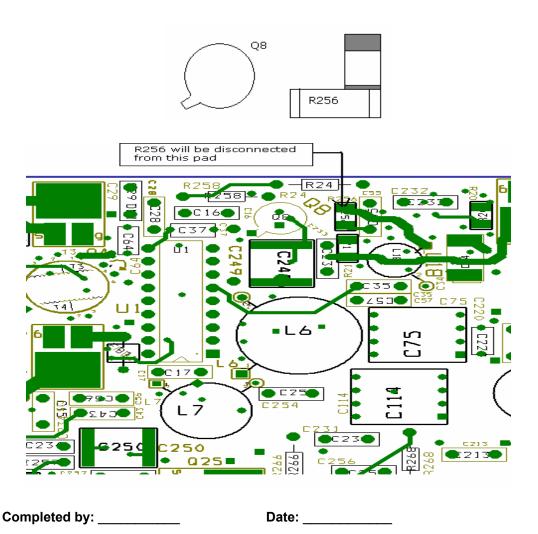
Corrective Action/ Resolution

1) Lift Pin 12 of U2.

Completed by: _____ Date: _____

2) Install R256 2.00K D55342H07B2E00R sideways (on the top side of the board); leave the pad not connected where it connects to L18 (See figure below).

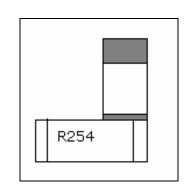
R256 D/C:_____

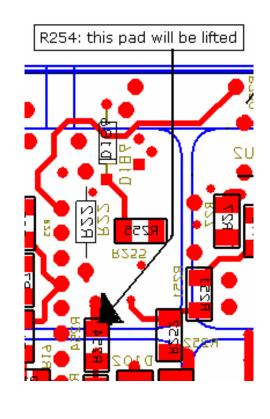




3) Install R254 (1.00M) sideways (bottom side of the board) where it connects to the via. (See figure below) R254 P/N: D55342H07B1F00R

D/C: _____ R254





Completed by: _____ Date: _____

4) Solder a magnet wire AWG 28 to U2 pin 12.

Completed by: _____ Date: _____



5) Connect U2 pin 12 to R254 (the left side of the resistor) using a magnet wire.

Completed by: D	ate:
-----------------	------

6) Connect R254 and R256 (the sides that are not connected to a pad) with a teflon wire. The wire will go through C16 pad. C16 is a Do NOT Install part. Use shrink tube on the wire where it crosses the hole. (See Figure below)

	C16	TOP SIDE OF BOARD
	C16 is not installed. DNI part	R256
ſ	BOTTOM SIDE OF BO	OARD #26AWG wire will go thorugh C16 pad
	magnet wire	R254
7)	Stake the wires using Uralane 5753.	
	Expiration date:	Mix ratio:
	Lot Number:	
	Start Time:	Stop Time:
	Completed by:	Date:



8) Take pictures of the completed rework/repair.

Complete	ed by:	Date:

Retest Results:

Corrective Action Required/Performed on other Units

Assembly Number(s):

Corrective Action Details: Engineering Change Order (ECO) 0002 is generated to correct EFI 2.5VD connection error. ECO 0002 is added to the Assembly Instructions. ECO 0002 will be performed before the testing occurs.

Acceptance:

MAM: Ron Jackson_____; MSE: Ellen Taylor_____

PM: Peter Harvey_____; Cognizant Engineer_____

Date of Closure