

MODIFICATION RECOMMENDED –  
CORRECTS MANUFACTURING OR DESIGN DEFECTS

**54754A-04**

# S E R V I C E N O T E

Supersedes:  
NONE

## 54754A Differential TDR Module

**Serial Numbers: 0000A00000 / MY42510397**  
**(First shipments that were screened for this issue began in September 2004)**

**TDR Module fails Vertical CAL, but passes after hot swap and re-test.**

**To Be Performed By: Agilent-Qualified Personnel**

**Parts Required:**

P/N	Description	Qty.
54754-66501	Digital Board	1

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
<b>MODIFICATION RECOMMENDED</b>		
ACTION CATEGORY: <input type="checkbox"/>	<input checked="" type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS: LABOR: 0.5 Hours + CAL
LOCATION CATEGORY: <input type="checkbox"/>	<input type="checkbox"/>	SERVICE INVENTORY: <input type="checkbox"/>
	<input checked="" type="checkbox"/> SERVICE CENTER	USED PARTS: <input type="checkbox"/> SCRAP <input type="checkbox"/>
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: End of Support
AUTHOR: RGS	PRODUCT LINE: 8F	
ADDITIONAL INFORMATION: Inspect Service Inventory for correct part (see Figure 1 and 2). Scrap assy with wrong part (Fig 1).		

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October 4, 2004

**Situation:**

Some 54754-65501 Digital Boards were loaded with the wrong voltage regulator, Semtech EZ1086 (see Fig 1 below) and under certain power-up conditions, it may cause a module Vertical failure.

To check for this condition, perform a module vertical CAL two times, as follows:

**Case 1:**

- a. Insert the 54754A module into the mainframe (86100A/B/C) and tighten the module anchor screws.
- b. Power on the mainframe.
- c. Perform Steps 1-3 below.

**Case 2:**

- a. Power on the 86100A/B/C mainframe (no module installed).
- b. Insert the 54754A module into the mainframe and tighten the module anchor screws.
- c. Perform Steps 1-3 below.
  1. On the GUI, select <Calibrate>, <All Calibrate>.
  2. Click <Calibrate Left Module> (or right module, as appropriate).
  3. Follow the directions on screen.

**Results:**

**Failure:** A “Module Calibration failed” dialog box will appear on screen. Click close.

**Pass:** A “Calibration Completed” message will appear in the message area beneath the graticule screen.

**Solution/Action:**

If a 54754A module fails module vertical cal in Case 1, but passes in Case 2 (Hot Swap), replace the digital assembly (54754-66501) per this Service Note.

**Note:** Digital Board failures which do not have the wrong part loaded (Figure 1) or do not have this failure mechanism are NOT covered by this Service Note.

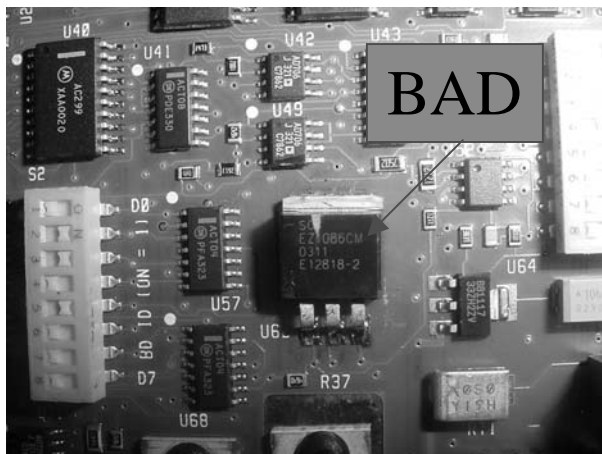


Figure 1 – Semtech EZ1086, Wrong Part

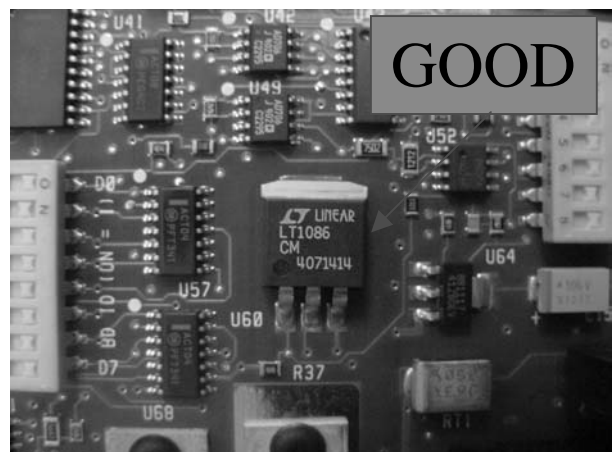


Figure 2 – Linear LT1086, Correct Part (P/N 1826-2910)