

**8648A-03**

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

---

Supersedes:  
NONE

**8648A Signal Generator**

**Serial Numbers: ALL**

**Ensuring the correct motherboard part number is entered when using the  
Motherboard Repair Utility.**

**Parts Required:**

<b>P/N</b>	<b>Description</b>	<b>Qty.</b>
------------	--------------------	-------------

NONE

**ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:	
<b>INFORMATION ONLY</b>	
AUTHOR: PY	PRODUCT LINE: 15
ADDITIONAL INFORMATION:	

© AGILENT TECHNOLOGIES, INC. 2008  
PRINTED IN U.S.A.

**May 2, 2008**

Rev. 14



**Agilent Technologies**

**Situation:**

After replacement of the motherboard, you will be required to use the 8648 Motherboards Utility which will download information into the controller portion of motherboard. Motherboard part number is 08648-60314 (for serial number prefix < 3836A/3836U) and 08648-60614 (for serial number prefix => 3836A/3836U). Currently 08648-60614 board is ordered with part number 08648-60053. Entering the motherboard part number to **0053** as the last 4 digit of the motherboard part number in the Motherboard Repair Utility will cause the instrument AM modulation not functioning below 1GHz.

**Solution/Action:**

After opening the Motherboard Repair Utility, you are required to enter the correct instrument serial number, model number and ensure the options installed are correct. For the A11 attenuator serial number, these fields are given a default state of N/A.

On the A3 Motherboard ID number portion, use the following guide below when entering the last 4 digits of part number:-

- For serial number prefix < 3836A/3836U, the last 4 digits is “**0314**”
- For serial number prefix => 3836A/3836U, the last 4 digits is “**0614**” (do not enter 0053 as the last 4 digits or else the AM modulation function below 1GHz will not work)

The screenshot shows the '8648 Motherboard Repair Utility' window. It has a title bar with the text '8648 Motherboard Repair Utility' and standard window controls. The main area is divided into several sections:

- Please enter the GP-IB address to establish communication with the DUT:**
  - Enter the DUT current address:
  - Enter the desired Serial Number:
- Enter the desired A11 Attenuator Numbers:**
  - Last 4 digits of part number:
  - 5 digit Serial number:
- Enter the desired A3 Motherboard ID Number (highlighted with a red box):**
  - Last 4 digits of part number:
  - 5 digit Serial number:
- Select the desired Model:**
  - 8648A
  - 8648B
  - 8648C
  - 8648D
  - Unknown
- Select the installed Options:**
  - 1E5 - HIGH STABILITY TIMEBASE
  - 1E6 - PULSE MODULATION
  - 1EA - HIGH POWER
  - 1EP - PAGER/ENCODER
  - HO1 - RF REMAINS IN SAME STATE
  - 1E2 - AUDIO OSCILLATOR
- Progress Indicator:**

At the bottom, there are three buttons: 'Get Data', 'Send Data', and 'Cancel'.

For more information, you can refer to Chapter 7 of the Service Guide, in the ‘Motherboard Repair Utility’ section. (this is a big file, will take awhile to download)

<http://cp.literature.agilent.com/litweb/pdf/08648-90048.pdf>