

S E R V I C E N O T E

SUPERSEDES: NONE

4156B Semiconductor Parameter Analyzer

Serial Numbers: See below.

Firmware Update to Fix Some Problems**Duplicate Service Notes:**

4155B-10 Serial Numbers: JP00A00000 / JP99Z99999

4156B-10 Serial Numbers: JP00A00000 / JP99Z99999

4155C-02 Serial Numbers: JP00A00000 / JP10J00250

4156C-02 Serial Numbers: JP00A00000 / JP10J00256

To be Performed by: Agilent-qualified personnel**Parts Required:** None**Situation:**

The following defects are fixed in the firmware (HOSTC 03.01, SMUC 04.02).

- SMU may oscillate when voltage is forced with DV in FLEX mode under the following conditions:
 - Setting except 2 V range before measurement.
 - Measuring with 2 V range / 100 mA compliance setting.

Continued

DATE: June 2001

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:					
MODIFICATION RECOMMENDED					
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR 0.5 Hours		
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		AGILENT RESPONSIBLE UNTIL: June 2003		
AUTHOR: TW	ENTITY: 3300	ADDITIONAL INFORMATION:			



- Correct status bit may not be read by using the SPOLL command in US/US42 mode.
- FLEX "WV/WI/QSV Sweep Step Value Too Small" error may occur even if the correct parameters are set.
- Wrong spelling is displayed during NFS mounting.
- HRVSVMU selftest fails intermittently (for 4155C/56C only).

Solution/Action:

Update the firmware to the HOSTC 03.01 and SMUC 04.02 by using the following procedure:

1. Go to the following location:

`ftp://hpyidmk.jp.n.agilent.com/dist/dc_para/4155C/firmware/HOSTC03.01/SMUC04.02/`

2. Save the 'h0301_s0402.zip' file to a local temporary directory. (Use the BINARY transfer mode to get the file.)
3. Extract directories and files from the 'h0301_s0402.zip' file, which is a 'zip' type compressed file. Four directories (disk1, disk2, disk3, and disk4) are created.
4. Copy the files in each directory to a 3.5-inch disk and label the disk. For example, after you have copied the files in the 'disk1' directory, label it "disk1".
5. Turn off the 4155B/56B/55C/56C.
6. Insert "disk1" into the 4155B/56B/55C/56C and turn on the 4155B/56B/55C/56C.
7. Press the {Yes} primary softkey to start the firmware update.
8. Replace the disks according to the displayed instructions. You use the disks in the following sequence:

disk1 -> disk 2 -> disk3 -> disk1 -> disk4

Note that "disk1" is used twice.

9. Wait until the update process completes.
10. Remove the disk and cycle the power.
11. Check the HOSTC and SMUC revisions on the [System]->{Config} page.

To do this update, 41501A,B SMU/PGU Expander is not necessary.