Modification Available Performance Enhancement Service Note

Supersedes:
E8267D-15B

E8267D Vector Signal Generator

Serial Numbers: US00000000-US50429999, MY00000000-MY50429999, SG00000000-SG50429999

Instrument failing self-test 704

Parts Required:

P/N	Description	Qty.
NONE		

ADMINISTRATIVE INFORMATION

[[]] Calibration Required	PRODUCT LINE: 15
X Calibration NOT Required Calibration NOT Required	AUTHOR: PY

ADDITIONAL INFORMATION:

Situation:

The self-test limits for A6 Frac-N to be updated to avoid possible faulty self-test failure 704. This applies for all instruments prefix <US4928/MY4928/SG4928 including units with Special Handling options HCC and HAR.

Solution/Action:

1. If you are experiencing self-test failure 704, verify the self-test limits by pressing: Utility > Instrument Information/Help Mode > Self-Test > View Test Info.
2. Using the RPG or the up and down arrow keys, scroll to self-test 704. Press: Run Highlighted Test.
3. When the self-test has completed, press: View Details. The lower limits for the following tests should be:
   600-1000 MHz lower = 0.5
   1-1.55 GHz lower = 0.5
   1.55-2.4 GHz; lower = 0.5
   2.4-3.2 GHz; lower = 0.5
4. If the self-test limits are correct, continue to troubleshoot the problem using the troubleshooting procedure.
5. If the self-test limits are incorrect, first verify that the instrument has firmware equal or higher then **C.06.17**. If yes, proceed to step (7). If not, update to the latest firmware.
6. If after upgrade firmware and the self-test still fail, proceed with the step (7).
7. Connect the instrument to LAN, then press: Utility > GPIB/RS-232 LAN > LAN Setup > LAN Config set to DHCP > Proceed with Reconfiguration > Confirm Change (Instrument will Reboot).
8. After the instrument had power cycle, press: Utility > GPIB/RS-232 LAN > LAN Setup and record down the IP address.
9. Open a browser window and type in the instrument IP address/update (http://xxx.xxx.xxx.xxx/update)
10. Then enter the following text into the 'Manual Calibration And Self-Test Update' box.

    ll "SYNTH", 13, 0.5
    ll "SYNTH", 14, 0.5
    ll "SYNTH", 15, 0.5
    ll "SYNTH", 16, 0.5
    ky 44752

System Update

WARNING: Do not use this page unless specifically instructed to do so by the Service Manual or a Service Note.

Initialize Option 601 and 602 (LVDS - DIG BUS BB GEN)	Execute
Restore Factory Setup (backed up before 601/602 update)	Execute
Recover Self Test System Files	Execute
Overwrite LICENSES.TXT	Execute
YIG Pretune Calibration	Execute
Update optional MECH ATTEN `remove:33328-60001 ⌄` Serial Number:	Execute
Update optional PULSE MODULATOR `remove:E8251-60064 ⌄` Serial Number:	Execute
Manual Calibration And Self Test Update `ll "SYNTH", 134, 0.5` `ll "SYNTH", 14, 0.5` `ll "SYNTH", 15, 0.5` `ll "SYNTH", 16, 0.5` `ky 44752`	Execute

11. Press 'Execute' button next to the 'Manual Calibration And Self Test Update'.
12. When the update is completed, another webpage will be displayed with the message 'Operation completed'. To finish, power cycle the instrument and verify the limits have been updated using steps 1-3 above.
13. If the replacement E8251-60647 board version is having either A0100 or A0101, the following SCPI command is required to be send.
14. To check the board version, press: Utility > Instrument Information/Help Mode > Installed Board Info and look for 'FRACN' > Version.
15. Open a browser window and type in the instrument IP address/display (http://xxx.xxx.xxx.xxx/display)
16. Send the following command: :SERV:REPL:FRAC

SCPI command `:SERV:REPL:FRAC`	SEND

17. Power cycle the instrument again and re-run the self test 704.

Revision History:

Date	Service Note Revision	Author	Reason for Change
21 August 2013	01	PY	Update to all affected Frac-N board for this self -test failure.
14 February 2017	02	SN	Update to include all affected Frac-N board for this self-test failure applies to all instruments including units with options HCC and HAR.
7 January 2020	03	PY	Update the serial number prefix and add 1 lower level limit to be updated (600-1000MHz). Additional steps required for Frac-n with Version A0100 or A0101.