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

SUPERSEDES: None

### 8752C Network Analyzer

**Serial Numbers:** 0000A00000 / 9999Z99999

# 8752C Firmware Revision 6.14 requires GPIB program to perform factory calibration (Service Test 53)

Parts Required: None

#### **Situation:**

For 8752C network analyzers which have Firmware Revision 5.48 and earlier, factory calibration of the instrument (Service Test #53) can be performed manually (the procedure is detailed in the 8752C Service Guide). However, the new firmware revision 6.14 contains a slight glitch in the algorithm for this particular test such that it must be programmed via the GPIB bus to ensure proper calibration.

#### **Solution / Action:**

The HP BASIC program that is linked to this document will control the 8752C to ensure proper factory calibration with Service Test #53. This program will run on a 9000 Series 300 or Series 700 workstation and is also compatible with the PC-based HP BASIC for Windows. Clicking on this link will display the contents of the program in your web browser; you can then click the "File" menu on your browser and select "Save As" to save the program to your floppy or hard disk as an ASCII text file.

Continued

DATE: August 1998

#### ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICAT	TION:	
INFORMATION ONLY		
AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
ВН	5320	

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- 100 ASSIGN @Vna TO 716
- 200 INTEGER Stat
- 210 DISP "Presetting the analyzer...please wait"
- 220 OUTPUT @Vna;"OPC?;PRES;"
- 230 ENTER @Vna;Stat
- 250 INPUT "Enter 50 or 75 for the test set impedance of your 8752C",Z0
- 251 OUTPUT @Vna;"TEST53;"
- 252 OUTPUT @Vna;"EXET;"
- 253 WAIT 1
- 254 OUTPUT @Vna;"TESR2;"
- 255 DISP "Clearing all registers...please wait"
- 257 WAIT 6
- 258 IF Z0=75 THEN
- DISP "Connect the Open (including center pin) to the REFL Port, then press F2 to continue"
- 260 ELSE
- DISP "Connect the Open to the REFL Port, then press F2 to continue."
- 262 END IF
- 263 PAUSE
- 264 DISP "MEASURING OPEN"
- 265 OUTPUT @Vna;"CLASS11A;OPC?;STANB;"
- 266 ENTER @Vna;Stat
- 267 OUTPUT @Vna;"OPC?;DONE;"
- 268 ENTER @Vna;Stat
- 272 DISP "Connect the Short to the REFL Port, then press F2."
- 273 PAUSE
- 275 DISP "MEASURING SHORT"
- 276 OUTPUT @Vna;"CLASS11B;OPC?;STANB;"
- 277 ENTER @Vna;Stat
- 279 OUTPUT @Vna;"OPC?;DONE;"
- 280 ENTER @Vna:Stat
- DISP "Connect the Load to the REFL Port, then press F2."
- 285 PAUSE
- 287 DISP "MEASURING LOAD"
- 288 OUTPUT @Vna;"OPC?;CLASS11C;"
- 289 ENTER @Vna;Stat
- 291 DISP "COMPUTING REFLECTION CAL COEFFICIENTS"
- 292 OUTPUT @Vna;"SAV1;"
- 293 WAIT 5
- 296 DISP "Connect the Thru from the REFL Port to the TRANS Port, then press F2."
- 297 PAUSE
- 299 DISP "MEASURING THRU"
- 300 OUTPUT @Vna;"OPC?;STANE;"
- 301 ENTER @Vna;Stat
- 302 DISP "COMPUTING TRANSMISSION CAL COEFFICIENTS"
- 303 OUTPUT @Vna:"OPC?:DONE:"
- 304 ENTER @Vna;Stat
- 305 DISP "DONE"
- 307 CLEAR @Vna
- 315 LOCAL @Vna
- 317 END