SUPERSEDES: None

HP 4156A Precision Semiconductor Parameter Analyzer

Serial Numbers: JP00000000 / JP99999999

Incorrect Power-on Test Error Codes

Duplicate Service Notes: None

Parts Required: None

Situation:

The problem occurs on the HP 4156As with the following firmware revisions:

HOSTC 01.00
SMUC 01.00
ADC   01.00

   or

HOSTC 01.01
SMUC 01.01
ADC   01.00

Continued

DATE: December 1994

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:
INFORMATION ONLY

AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
MO	3300	

HEWLETT PACKARD

The problem shows the following phenomena:

- Two adjacent HRSMUs (or VSVMU and HRSMU1) fail the Power-on Test.

- The HRSMU with the smaller unit number (or VSVMU) fails ONLY the Power-on Test. It passes the Selftest performed manually.

- The HRSMU with the larger unit number fails both the Power-on Test and the Selftest performed manually with an error code 10x20.

Power-on Test Error Codes Examples:

- error 10320 on HRSMU3 and error 1022x on HRSMU2

- error 10120 on HRSMU1 and error 100xx on VSVMU

Solution/Action:

If all the above conditions are satisfied, the smaller-number unit may not be defective and the Power-on Test error code(s) displayed for this unit may be caused by a defect in the firmware.

To verify that only the larger-number unit is defective, use the troubleshooting procedure "1-4: Selftest Fail in Multiple Modules of SMUs/VSVMU in 4155/6 Mainframe Only" in the HP 4155A/4156A Service Manual. (Do NOT replace the two units that failed the Power-on Test at the beginning.)

This problem will be fixed in the HOSTC and SMUC firmware revision 1.02.