

N5183B-10

Information Only Service Note

Supersedes: None

N5183B X-Series MXG µWave Signal Generator

Serial Numbers: ALL

The Problem: **Problem** – Self-test #104 failure if replacing either the A3 RF Assembly with Hardware ID 000A or the A7 Micro-deck containing A7A1 ALC control board with hardware ID 0002 is not upgraded to the minimum FW B.01.96.

Parts Required:

P/N Description Qty.

NONE

ADMINISTRATIVE INFORMATION

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

ADDITIONAL INFORMATION:



Situation:

The A3 RF assemblies and A7A1 ALC control board on the A7 micro-deck were enhanced to support a new 12bit ADC for assurance of supply (AOS). Replacement of either the A3 RF Assembly, N5180-60173 with Hardware ID 000B or the A7 Micro-deck containing A7A1 ALC control board, N5180-60172 with Hardware ID 0002 will require minimum FW B.01.96 for it to operate properly. Multiple self-test failures can be observed after completing the self- test, as shown in Figure 1.

Figure 1 – Multiple self-test failures

FREQUENCY	Self Test
40.000 000 000 000 GHz -135.00 dBm	Run Complete Self Test
L UNLOCK ERR	
Self Test Summary	
The current status of self test is: Failure One or more tests have failed. System diagnostics indicate this test as the root failure: 104	
	View Test Info⊧
Passes: 8 Fails: 51	

First, check that the hardware ID for the replaced assembly. This can be found on the **Utility**, **Instrument Info**, **Installed Board Info** screen of the instrument, as shown in Figure 2.

Figure 2 -	Installed	Board	Information	Screen
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	UENCY 1.000	000 000	0 000 GHZ	RF OFF -135	.00 dBm	Self Test
L Insta Name	alled Board I	nformation Part#/Rev#	Serial#	HUID FR PIC	Opts Extr	_
RF	Analog FPGA PCI FPGA	N5180-60151 7,1db0,150 7,0130,000 2,12ba,131 12d,0000,0	232144000113 1:cd38 0:feb9 a:da2a	and and address of the local distribution of the province of the local distribution of the local	0000 0000	
 MW	PCI FPGA		23213000051	0002 000 000	0000 0000	
CPU ***	PROTO CODE **	0960-3295 NOT FOR CUST	80154 OMER USE ****	0001 000 DIAGNOSTIC OVE	0000 0000 RRIDE ***	

Factory has also made an identification on this firmware requirement.

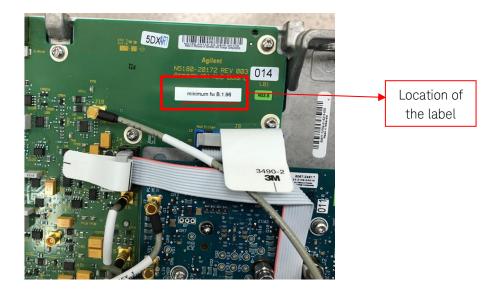
On the RF assembly, a label "minimum FW B.1.96" will be pasted on the shield, as shown in Figure 3.

Figure 3 – Location of label on the RF assembly



On the micro-deck, a label "minimum FW B.1.96" will be pasted on the ALC control board as shown in Figure 4.

Figure 4 – Location of label on the ALC control board



Solution/Action:

Upgrade the instrument firmware to B.01.96. Go to <u>http://www.keysight.com/find/mxg_firmware</u> to download the instrument firmware.

Once the firmware successfully upgraded, verify that the self-test is passing on the instrument.

Revision History:

Date	Service Note Revision	Author	Reason for Change	
26 Apr 2022	01	Petrina Yong	As Published	