

N5181B-06

Information Only Service Note

Supersedes: None

N5181B X-Series MXG Analog Signal Generator

Serial Numbers: ALL

The Problem – Self-test #104 failure if replacement A3 RF Assembly N5180-60296 with Hardware ID 0008 is not upgraded to the minimum FW B.01.96.

Parts Required:

Description P/N Qty.

NONE

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ADMINISTRATIVE INFORMATION

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

ADDITIONAL INFORMATION:



Situation:

The A3 RF assemblies were enhanced to support a new 12bit ADC for assurance of supply (AOS). Replacement of the A3 RF Assembly, N5180-60296 with Hardware ID 0008 will require minimum FW B.01.96 for it to operate properly. Multiple self-test failures can be observed after completing the selftest, as shown in Figure 1.

Figure 1 – Multiple self-test failures

FREQUENCY	Self Test
6.000 000 000 000 GHz -144.00 dBm	Run Complete Self Test
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	Vieµ Test Info∙
Passes: 24 Fails: 45	

First, check that the RF assembly is with hardware ID 0008. 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

FRE	DUENCY 6.000	000 000	О ООО ын		off -144	.00	dBm	Board Info	
Inst Nar	talled Board I Ne	nformation Part#/Rev#	Serial#	HUID	OFR PIC	Opts	Extr		
RF	Analog FPGA PCI FPGA Ref FPGA Synth FPGA	N5180-60296 7,1db0,150 7,0130,000 2,12ba,131 12d,0000,0	0:feb9 a:da2a	0008	000 000	0000	0000		
BB	IF FPGA BBG FPGA Memory PROTO CODE **	2,1462,112 40d6,1794, 2GB + 2GB	0338:e524	0000	001 000	0000	22 09:56		

Factory has also made an identification, where a label "minimum FW B.1.96" is pasted on the shield, as shown in Figure 3.

Figure 3 – Location of label on the RF assembly



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