Keysight UXA Signal Analyzer
Option DP5
Digital Processor, 4 GB Capture Memory

Notice: This document contains references to Agilent. Please note that Agilent's Test and Measurement business has become Keysight Technologies. For more information, go to www.keysight.com.

Installation Note

Option DP5, Digital Processor 4 GB Capture Memory

Products Affected:	UXA N9040B
Serial Numbers:	<MY/SG/US5608
To Be Performed By:	(X) Keysight Service Center
	( ) Personnel Qualified by Keysight
	( ) Customer
Estimated Installation Time:	2.0 Hours
Estimated Adjustment Time:	3.0 Hours
Estimated Verification Time:	Varies with installed options

Introduction

This N9040BU-DP5 retrofit kit is used to replace both Wideband Digital IF assemblies in instruments with Option B5X, 510 MHz Analysis Bandwidth. The replacement Wideband Digital IF assemblies in this kit contain additional memory. You will install a license for N9040B-DP4. The N9040BU-DP5 kit is the product ordering option that provides the hardware and the N9040B-DP4 license.

The option is licensed for one instrument model number/serial number combination. The license file that is downloaded from the web will only install on the designated instrument.

NOTE	This upgrade requires instrument software version A.17.55 or later, and requires the software to be reinstalled even if the instrument contains the latest version.
	To verify that the current version is installed, press **System**, **Show**, **System** and look for the "Instrument S/W Revision"
	The latest revision of the X-Series Signal Analyzers software may be downloaded from
	http://www.keysight.com/find/xseries_software

Option DP5, Digital Processor 4 GB Capture Memory

Contents

Quantity	Description	Part Number
1	Installation Note	This note
1	Option Upgrade Entitlement Certificate	5964-5178
2	Wideband Digital IF Assembly	N9020-60311
20	Screw, Flat Head, M3 x 0.6 6 mm long	0515-1946

Tools Required

— Personal computer with internet access and USB port

— LAN connection to instrument (allows factory to control unit)

— USB storage device with > 2 GB free memory

— T-10 TORX Driver

— T-20 TORX Driver

— Keysight Calibration and Adjustment Software, N7814A (revision E.17.00 or later)

— UXA Signal Analyzer Service Guide, N9040-90006. Available online.

— Test equipment and computer supported by the Keysight Calibration and Adjustment Software

Initial instrument Functionality Check

Power on the instrument and allow the instrument to boot up, run the alignments and display the measurement screen. The instrument will probably display a spectrum analyzer screen and you will see the instrument sweeping.

There should be no alignment failures. If there are failures, investigate and fix the problem before continuing.

Hardware Verification

1. Press **System**, **Show Hardware**.

2. Look for two entries of the WB Digital IF.

3. If the part number is N9020-60311, the Wideband Digital IF assemblies currently installed **will** support Option DP4. You **do not** need to replace the Wideband Digital if assemblies.
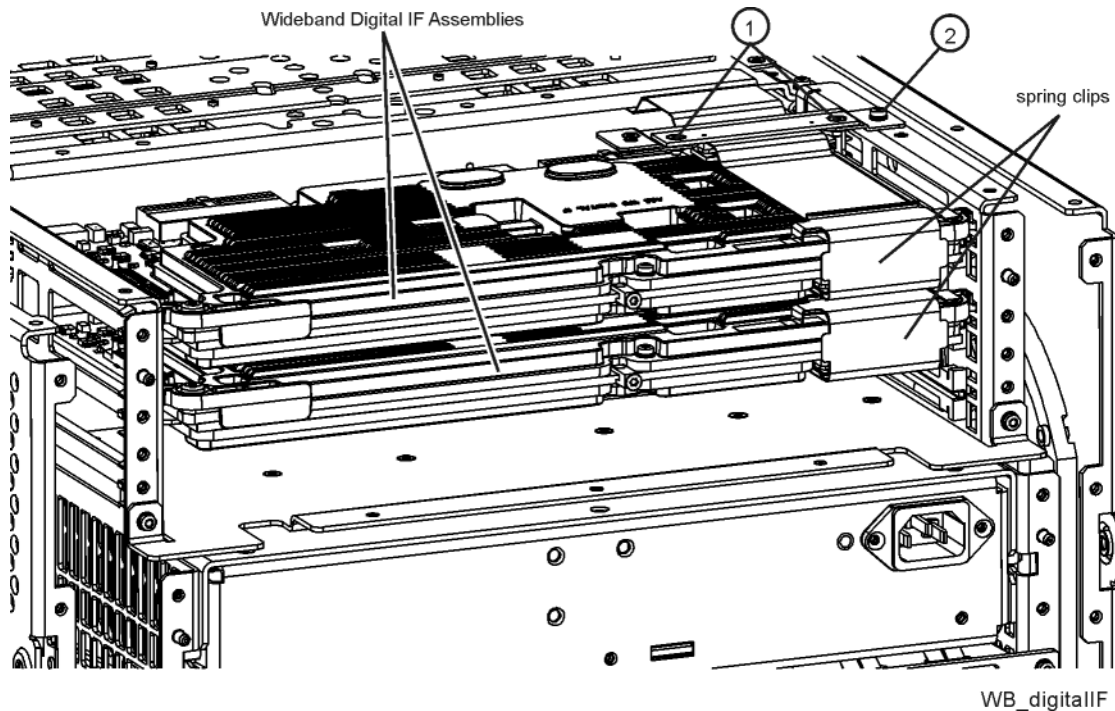
NOTE   You must license DP4 and assure the instrument SW revision is A.17.55 or later.

Wideband Digital IF Assemblies Replacement

1. Power down the instrument, wait until the standby light comes on, and remove the power cord.

2. Remove the instrument side strap handles, feet, outer case, rear top brace, rear panel, and remove the rear brace. See the UXA Service Guide Assembly Replacement Procedure section for A22 and A23 WB Digital IF Boards. Save all screws for reuse.

3. See Figure 1. Remove the two spring clips securing the flex cable to the Wideband Digital IF assemblies, and remove the flex cable from the board headers.

Figure 1   Wideband Digital I.F. Assemblies Installation

4. Remove both Wideband Digital IF assemblies from the card cage. This assembly looks almost exactly like the new assembly in the kit, so place the removed assemblies far away from your work area to avoid re-installation.

5. Locate the two Wideband Digital IF assemblies in the kit, and install these assemblies as shown in Figure 1. It does not matter which of the replacement assemblies goes into the top card cage slot, since both assemblies are identical. Re-attach the flex cable and spring clips.

6. Reinstall the rear brace. Use two of the flat head screws included in the kit to secure the Wideband Digital IF assemblies to the rear brace. Torque screw to 9 inch-pounds.

7. Reinstall the rear panel. Torque screws to 9 inch-pounds.

8. Reinstall the rear top brace. Use the flat head screws in the kit, and the pan head screws previously removed. There will be extra flat head screws in the kit. Torque screws to 9 inch-pounds.

9. Reinstall the outer case, side strap handles, and feet.

10.Power up the instrument. Assure the instrument passes the auto alignments

Instrument Software Installation

This upgrade requires instrument software version A.17.55 or later, and requires the software to be reinstalled even if the instrument contains the latest version. Installing the instrument software assures the FPGA code on the replacement Wideband Digital IF assemblies is refreshed.

To verify that the current version is installed, press **System**, **Show**, **System** and look for the "Instrument S/W Revision".

The latest revision of the X-Series Signal Analyzers software may be downloaded from

http://www.keysight.com/find/xseries_software.

License Installation Procedure over USB

1. Locate the Option Upgrade Entitlement Certificate (5964-5178) from the kit.

2. Redeem the Option Upgrade Entitlement Certificate by following the instructions on the Certificate.

3. After redeeming your Option Upgrade Entitlement Certificate you will receive an email with an attached License File.

4. Locate a USB storage device. Perform a virus scan on this device before use.

5. Save the License File to the root directory of the USB storage device.

6. Connect the USB storage device to the signal analyzer USB port. Windows will detect the new hardware and may display the configuration menu shown in Figure 2. This menu may be configured according to your preferences.

Figure 2   USB Storage Device Configuration Menu

7. The signal analyzer will automatically consume the License File. (This may take a few minutes) When the License File is consumed the Keysight License Manager will display a "Successful License Installation" message as shown in Figure 3.

Figure 3   Successful License Installation

Alternate Installation Procedure

The License File can be manually installed over USB or LAN by placing the license file in the following folder on the signal analyzer

C:\Program Files\Agilent\licensing

Verify the Installation

1. Cycle power on the signal analyzer and wait until the analyzer boots to the measurement application screen.

2. Press **System**, **Show**, **System** to display a list of installed options.

3. Verify that the installed option list contains the newly installed N9040A-DP4, Digital Processor, 4 GB Capture Memory.

Utilities, Adjustments, and Performance Verification Tests

Utilities Required

None

Adjustments Required

Adjustment Name
None

Performance Testing Required

Verification Test Name
Perform IF Flatness performance tests

For assistance, contact your nearest Keysight Technologies Sales and Service Office.
To find your local Keysight office access the following URL, or if in the United States, call the following telephone number:

http://www.keysight.com/find/assist

1-800-829-4444 (8 am - 8 pm ET, Monday - Friday)

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