N9020A-03

S E R V I C E N O T E

Supersedes:
NONE

N9020A MXA Signal Analyzer

Serial Numbers: ALL

MXA Signal Analyzer Removable Disk Drive and CPU Compatibility

As of April, 2012, there are two versions of CPUs used in MXA signal analyzers that accept removable disk drives, but not all removable disk drives can be used on all versions of CPU.

Parts Required: NONE

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **INFORMATION ONLY**	
AUTHOR: BDT	PRODUCT LINE: 12
ADDITIONAL INFORMATION:	

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PRINTED IN U.S.A.

May 2, 2012

Agilent Technologies

Situation:
As of April, 2012, there are two versions of CPUs used in MXA signal analyzers that accept removable disk drives, but not all removable disk drives can be used on all versions of CPU. It is the image with which the disk drive was built that determines with what CPUs the disk drive is compatible. The currently-running instrument software version is not necessarily the same as the image with which the disk drive was built**.**

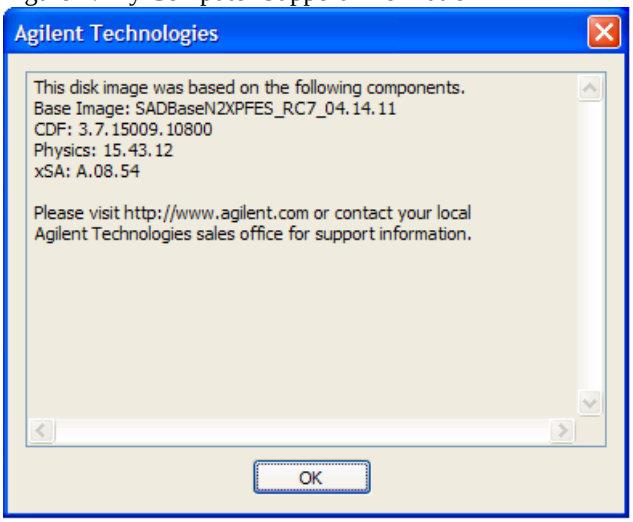
Solution/Action:
The two CPUs with removable drives and the supported images are listed in Table 1. To view the CPU Option, press **System**, **Show**, **System** on the analyzer. One of the first two options listed will be the CPU option (if the instrument software version is >= A.02.06). Instrument software versions prior to A.02.00 only supported the N9020A-PC1 CPU, which did not have a removable drive.

Table 1. EXA CPUs with Removable Drives and Supported Images

CPU Option	CPU Type	Supported Images
N9020A-PC2	Intel ® Core TM Duo T2500 @2.00 GHz	>= A.02.06
N9020A-PC4	Intel ® i7 L 620 @2.00 GHz	>= A.10.04

To determine what the image version is for a particular disk drive, click **Start**, right-click **My Computer**, and select **Properties**. Click on **Support Information**. You will see a text box similar to Figure 1.

Figure 1. My Computer Support Information



The image version is the version of the XSA Signal Analyzer application. In the case of the example above, this would be A.08.54. According to Table 1, this version is compatible with N9020A-PC2, but not N9020A-PC4.

Even if a disk drive has a compatible image, this does not mean that the drive can be easily shared amongst several different types of CPUs. When a new disk drive is installed in an analyzer, the disk drive is “unsealed” at first power-up. As part of the unsealing process, the operating system discovers what CPU hardware is being used and configures itself properly for that CPU hardware.

Once the disk drive has been unsealed, it is configured only for the type of CPU in which it was originally installed. If it is necessary to use the disk drive on a CPU of a different type (a “new CPU”), and the image on the disk drive can support the new CPU, it will be necessary to perform an Agilent Recovery. This essentially returns the disk

drive back to what it was like when it was new. Any updates to the XSA Signal Analyzer application and any user-installed software on the C: drive is over-written by the recovery process. The recovery process, however, does not delete or overwrite any files on the D: (user documents) or E: (calibration data) drives.

As part of the recovery process, the operating system will again discover what CPU hardware is being used and configure itself appropriately.

CAUTION: Agilent does not support sharing a disk drive amongst several analyzers, even if the CPUs are all of the same type. The reason for this is that the disk drive also contains the calibration files which are unique for each analyzer. Sharing a drive amongst several analyzers requires separately backing up and archiving the calibration files for each analyzer and making sure these backups and archives are updated whenever the analyzer is calibrated or repaired. This requires great discipline.

An upgrade kit is available to upgrade to the N9020A-PC4 CPU. This kit, N9020AK-PC4, includes a new solid state drive (SSD) with the currently released instrument software installed. This kit is designed to upgrade the CPU on a properly-functioning analyzer and should not be used to replace a damaged CPU. Upgrades require a properly-functioning analyzer so that it will be possible to back-up the calibration files using the original CPU and then restore the calibration files once the new CPU is installed.

CPU replacement kits are also available to replace damaged CPUs. These kits do not include a new SSD since it should be possible to re-use the original SSD or HDD. These kits should not be used to upgrade from one CPU type to another. Refer also to service note N9020A-01 for CPU replacement kit part numbers.